

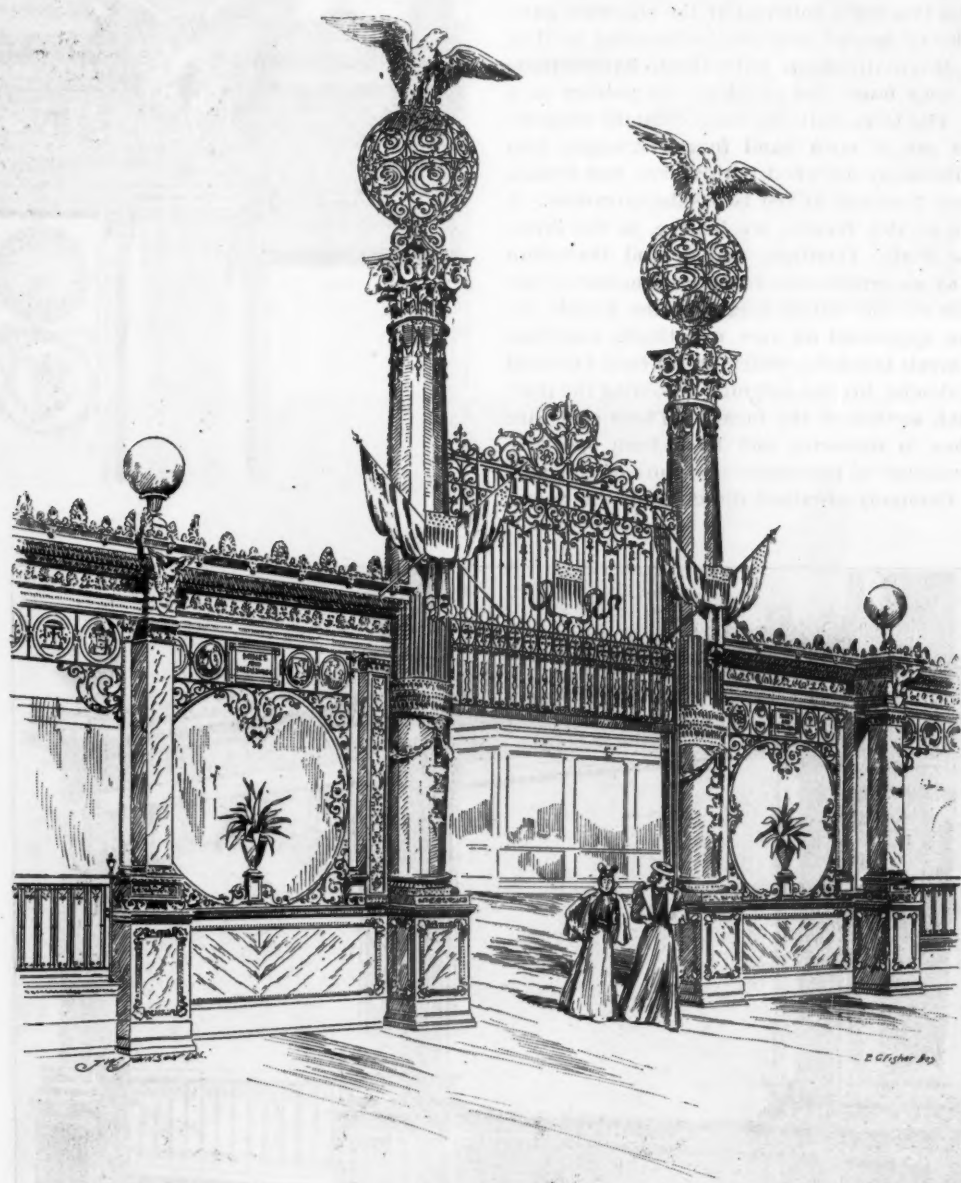
THE IRON AGE.

THURSDAY, MARCH 1, 1900.

The Facade at the Main Entrance of United States Mines and Metallurgy Building Paris Exposition.

The facade at the main entrance of the United States exhibit in the Mines and Metallurgy Building at the Paris Exposition is 162 feet in length. The height of the two main entrance columns is 30 feet and the panels between the other columns are about 15 feet high. The

marble columns, while the balance is treated in a fine emery and sand finish, giving a satiny effect which is very beautiful. The pedestals and base work through the entire length of this facade are executed in iron, fine sand finish and bower-barffed, this bower-barff finish being a magnetic oxide of iron treatment, necessitating the work being heated to a temperature of about 1300 degrees in a specially constructed furnace, giving the work a satiny, dead blue-black color, which is quite attractive. This finish has been used con-



THE FACADE AT THE MAIN ENTRANCE OF UNITED STATES MINES AND METALLURGY BUILDING.

facade was designed and built by the Winslow Bros. Company of Chicago.

The general character of the design is treated in a free Italian Renaissance style, more or less liberty having been taken in the detailed treatment, with a view of introducing somewhat of a festive character and at the same time maintaining dignity and elegance. The general effect is certainly best expressed by these two latter words, "dignity" and "elegance," with the addition of richness obtained by the combination of the real statuary bronze, parts of which are polished, such as the slender columns alongside of each of the square

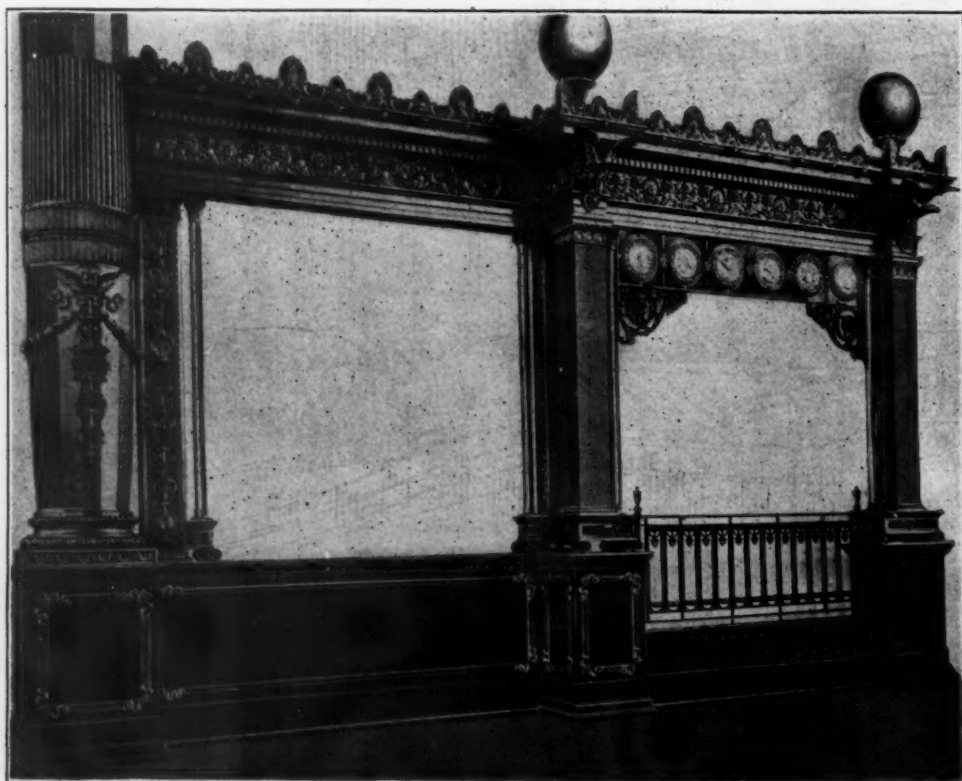
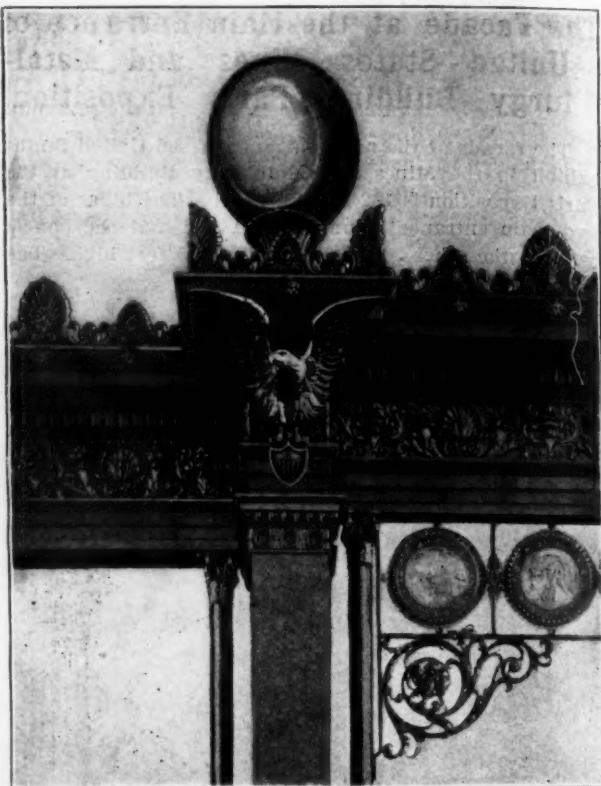
siderably in this country for fine metal work, especially hardware and grille work. The wrought iron railings above the bases, between the columns in the various bays, also the very elaborate wrought iron portcullis gate in the center and the grille work in the bays adjoining same, are also treated in this finish, the detail of this wrought iron work being executed by hand throughout; the design has introduced into the various parts rich leaves and flowers artistically wrought. In the above mentioned bases or pedestals are set panels of various marbles and stones, the detailed description of which we are not familiar with. The main support-

ing columns throughout the entire facade and the four round columns in connection with the two side entrances are also of stone and marble, detailed description of which we are also not familiar with.

The main cornice, as also the bases immediately over the pedestals and caps in connection with the clustered columns throughout, also all the pilaster columns (the square ones), together with the main cornice, the two large columns at the main entrance, are executed in cast iron, heavily electro plated in statuary bronze metal, with fine sand finish, as above mentioned. All the modeling throughout this work and the design of the ornaments in connection with this facade have been made especially and are unique with this facade.

The eagles over each of the clustered columns on the frieze of the cornice and the two large eagles over the main entrance are especially modeled for this facade, and are very characteristic of our typical bird. The large pedestals to the two main columns at the entrance gateway are worthy of special mention, introducing as they do the Rocky Mountain sheep, with their characteristic horns, giving very much the effect of the volutes to a classical cap. The large balls on these columns supporting the eagles are of open hand forged wrought iron work, very elaborately designed with leaves and scrolls, as also the arch features in the two side entrances. A special feature of this facade, we believe, is the introduction of the State, Territory, Indian and Hawaiian seals, located as an ornamental feature immediately below the cornice for the entire length of the facade between columns, supported on very artistically executed and modeling scroll brackets, which are in turn fastened directly to the slender bronze columns adjoining the marble ones in each section of the facade. These seals are about 14 inches in diameter and have been specially modeled by a number of prominent sculptors of Chicago. The Winslow Company obtained direct from the Secre-

Island of Hawaii. A few duplicates had to be made in order to fill the required quota to complete the facade, there being actually 62 required to complete the design. The 11 large balls coming over the clustered columns are 20 inches in diameter each and are made of burnished bronze.



THE FACADE AT THE MAIN ENTRANCE OF UNITED STATES MINES AND METALLURGY BUILDING.

tary of State of each State and Territory a late and correct impression to work from, so that these seals are absolutely correct technically and form a very beautiful exhibit of *bas relief* modeling. There are some 56 different models, comprising all our States and Territories, together with some six American Indian nations and the

The detail of the modeling in the frieze and the arabesques in the pilasters are very richly designed and modeled, and in the center of the arabesques are introduced features typical of mines and metallurgy and oil producing industries, such as hammers, tongs, picks, &c., and in the arch entering the petroleum section are also

introduced the Roman lamp, as typical of the use of oil, together with implements in connection with this industry. The American shield ornament has been used a great deal in connection with the frame surrounding the marble panels and bases, also in connection with the smaller bases immediately supporting the clustered columns, and the modeled leaf work in these smaller bases is so modeled as to stand out free from the panel, being "undercut," as it is known technically. In the caps of the square columns are also introduced small circular jewels in groups of three, to give variety, color and effect. The main entrance gate is built on the portcullis principally—i. e., to raise and lower—the counterweights being hidden in the two adjoining columns, the intention being that this gate be lowered while the exhibit is not open and raised in the position shown on the design, Fig. 1, when the exhibit is open. The collapsible gates have been provided for the two side entrances, which will fold up and be out of sight behind the adjoining columns when not in use. In considering the technical execution of this facade we believe it represents a most considerable development in this branch of the art industries of our country.

Mining in Mexico.

MEXICO, January 26, 1900.—In treating of a country which, at least as to mining, has been so often misrepresented, it is well to observe at the very outset that Mexico is to-day one of the safest mining sections in the world. Safe, I mean not only for life and property, but from the investor's point of view. He has a host of

hua Railroads are doing much, and will do more in the near future, to help the development of this new but wonderfully rich district, which is now easily reached. The favorable rates of freight and the inducements offered by the smelters are causing an influx of miners and capitalists, from our Western States principally. Gold quartz in paying veins is found throughout Central Sonora and Western Chihuahua, but little was done in gold mining in said sections till American prospectors showed their permanent value as investments.

Iron mining is relatively a new industry in this country. Nevertheless Chihuahua has a well equipped



THE FACADE AT THE MAIN ENTRANCE OF UNITED STATES MINES AND METALLURGY BUILDING.

mineral districts to choose from, be it for gold, silver, copper, iron, lead or other metals. Furthermore, the laws are liberal and very strictly enforced.

Silver is and always has been one of the principal products of the native mines, and now, with the increase of trade in Japan and China, this metal has a good chance to improve in value. Most of the old mines of Zacatecas, Pachuca, Chihuahua and Guanajuato districts continue to produce steadily, as many of them have done for the last 250 years. But new mines are also being opened up by both natives and Americans. The Sierra Madre regions of Chihuahua and Sonora are coming rapidly to the front as producers of both silver and gold. The Central Mexican, Sierra Madre and Chihua-

plant, supplied from the mines of Sierra del Hierro, Durango, Mercado and other districts. Enrique Creel, the Rockefeller of Mexico, has with characteristic pluck and energy constantly enlarged this plant, till now it manufactures steel rails, mining machinery of all kinds, as well as agricultural implements. Another large rolling mill is to be erected at Monterey, Nuevo Leon, most of the capital for same (\$10,000,000) having already been subscribed in the country. Still, importers of mining, agricultural and other machinery have constantly increased sales and orders for every section of the republic. So great has this business become that there are not sufficient cars at the port of Tampico to move the thousands of tons of machinery which have been

waiting transportation into the interior for a month or more.

The working of the Huntington coal fields in the Rio Grande district of Coahuila and the recent discovery of a good grade of brown coal near Mezquitz have helped to give an impetus to the manufacturing industries here. It is probable that Japanese laborers will be imported to work these mines, and many of the metal mines of Chihuahua, the recent treaty between Japan and Mexico making it possible to employ large numbers of this intelligent race. In fact, Yoshibumi Murota, the Japanese Minister to Mexico, has been studying the resources of the land most thoroughly as far south as the Isthmus of Tehuantepec, and he believes that the mining regions from Sonora southward can be supplied with Japanese laborers, who will either come via San Francisco or direct from Asia to Guaymas, Mazatlan and Acapulco.

Although there are large numbers of Mexican laborers, with the increase of wages they are not always willing to work steadily, this causing serious loss to such concerns as the large smelters at Monterey and Aguas Calientes, which employ 2000 or 3000 men each. Within the last few weeks the Government has taken the matter in hand, and any idlers or loafers found in the aforesaid towns are at once sent to work on the public roads. This plan is said to be working satisfactorily and many have gone back to the smelters and mills, seeking their old places.

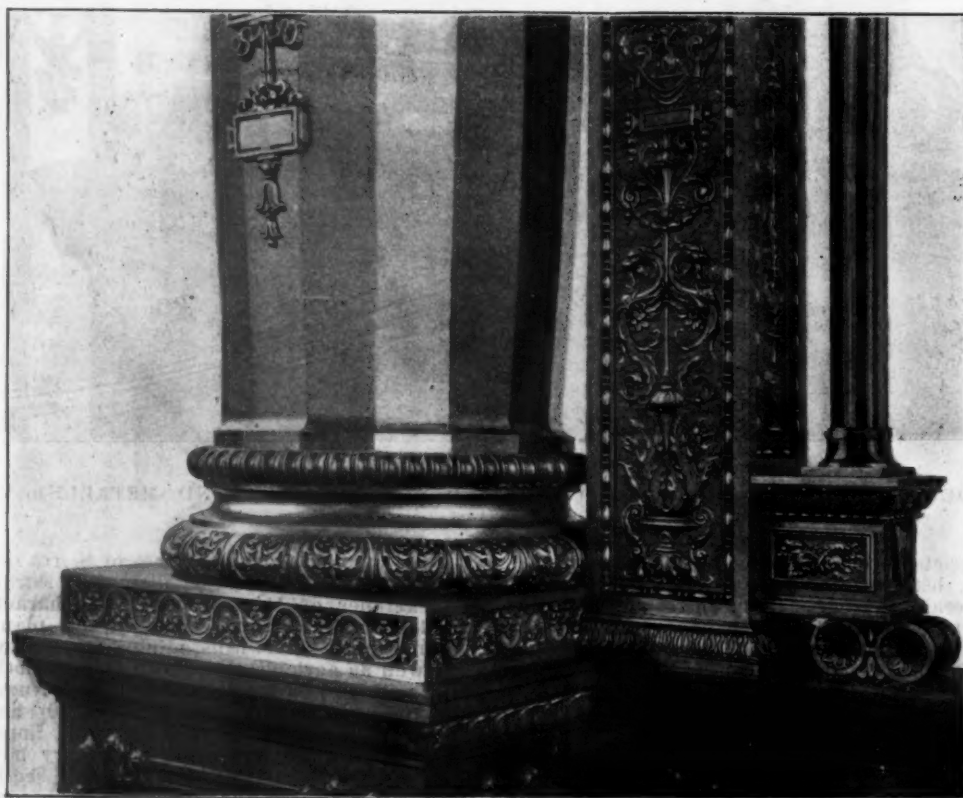
Among the gold and silver properties which during 1899 paid dividends of over \$250,000 each are: Peñoles (State of Durango), \$1,100,000; Santa Maria La Paz, \$888,000; La Reina (Chihuahua), \$370,500; Esperanza (El Oro), \$360,000; Hacienda, Guadalupe, \$260,000; El Alacran, \$252,000; Santa Gertrudes y anexas, \$250,000.

The general financial condition is very good. The Secretary of the Treasury, Señor Limantour, shows in his last report that the country has a cash surplus of over \$27,000,000. Mexican bonds are well above par. Peace and prosperity go hand in hand all over the land, while new roads, new steamship lines and enterprises of every kind are being established daily, from the Rio Grande on the north to the Isthmus of Tehuantepec on the south.

Labor and capital are, generally speaking, on very good terms here, and between the two they have redeemed this one time land of revolutions and bloodshed.

JNO. RICE CHANDLER.

The American Brass Company, formed by consolidation of the Ansonia Brass & Copper Company, the Coe Brass Mfg. Company and the Waterbury Brass Company, have filed a certificate, showing that all the recent increase of capital, \$6,000,000, has been paid in.



THE FACADE AT THE MAIN ENTRANCE OF UNITED STATES MINES AND METALLURGY BUILDING.

The Chicago Machinists' Strike.

Labor troubles have suddenly broken out in the machine shops of Chicago. It had been expected that March 1 would see strikes declared in a number of shops, as the demands made by the International Association of Machinists stipulated that the proposed new rules should go into effect on that date. But the men in some of the shops evidently became impatient and, having ascertained that their demands would be refused, determined to force the fighting. Strikes were therefore declared last week in the machine shops of the Western Electric Company, the Siemens & Halske Electric Company, Fraser & Chalmers, G. A. Crosby & Co., Morgan-Gardner Electric Company, Wood's Motor Vehicle Company, Latham Machinery Company, Weir & Craig, Mills Novelty Company and some others. It was estimated on Saturday that over 1000 machinists were out, the total number in Chicago being estimated at 7000. About half of this total belong to the union, few shops, if any, having hitherto been absolutely under union control. But the striking of the union men has practically tied up all work in the affected shops. If the men win in this fight the union will hereafter govern every shop. On this subject the Western Electric Company posted the following notice in their shops after their machinists had struck:

"Several labor unions have made a demand upon this company that they employ only union men and make this shop a union shop. The company will not comply with this demand. All employees who continue at their work now will be kept in their positions as long as there is work for them to do and they do it satisfactorily. We do not expect disturbance of any sort, but if any occurs the company will spare no pains or expense to protect their employees. No dissatisfaction whatsoever has been reported to us by any of our employees, and if just cause for any exists we are ready at all times to consider and remedy it."

The employers have decided not to undertake to settle the difficulty single handed. The questions coming up are of such a character and the interests involved are so important that they have formed an organization under the name of the Chicago Association of Machinery Men and have secured an office in the Fisher Building for business meetings. P. W. Gates of the Gates Iron Works is president, C. J. De Berard of the Tarrant Foundry is secretary, John H. Shanley of the Woods Motor Vehicle Company is treasurer and the Executive Committee, besides these gentlemen, comprises H. K. McLean of the Link Belt Machinery Company, W. J. Chalmers of Fraser & Chalmers, J. J. Walser of the Goss Printing Press Company, R. S. Greenlee of Greenlee Bros. & Co. and W. I. Babcock of the Chicago Shipbuilding Company. The Executive Committee has had some conferences with representatives of the machinists' union, but considerable time will probably elapse before the differences are settled.

Greater Than the Automobile.

BY CHARLES W. MEARS, CLEVELAND, OHIO.

In proportion as bicycles now outnumber horse-drawn carriages, so will motor bicycles outnumber motor carriages when both are at the height of their popularity.

This statement, entirely unexpected at a time when the world seems to regard the motor carriage, or the automobile, as its eighth wonder, is founded upon the thoughtful opinion of men prominent in the two industries of bicycle building and of automobile manufacture, and has, beyond the mere expression of a belief, good reason for its existence. The statement does not argue that motor vehicles are not to enjoy a popularity enormously beyond the expectation of the casual observer of things locomotive, nor does it comprehend in any degree the use as a draft wagon of the horseless vehicle. Quite on the contrary, it admits the one and leaves wholly out of consideration the other; and is meant to apply to only the motor vehicle designed to carry human freight.

This vehicle must necessarily have but a limited sale. It is primarily the rich man's equipage and can hardly ever be else, for its price, at present prohibitive to the average American citizen, will be many years in tumbling from its now lofty perch to an approachable figure. Considerations other than that of first cost, which will limit the sale of the passenger automobile to the well-to-do classes, are the expenses of running, repairs and housing. It cannot be maintained for the proverbial song, nor can it be housed in the back hallway, the kitchen or the cellar as are so many of that utilitarian steed, the plebeian bicycle. Until a more general knowledge of machinery is disseminated the motor carriage in the hands of the public will be a frequent repair shop visitor, and its

intricate parts and expensive machinery will tax the owner's purse to no inconsiderable extent.

But, despite all this, the horseless carriage possesses so many advantages that it will not be compelled to beg for purchasers. It is safe to venture the forecast that for two years at least no automobile factory in this country will be able at any time to fill its orders upon receipt thereof, and there promises after that to be a healthy demand that will establish the motor vehicle industry on a most substantial footing.

But for the same reasons that the bicycle of to-day is the vehicle of the masses, will the motor bicycle of the morrow prove itself equally popular and useful. It will be the bicycle that we already know, but little altered from its present form save in the addition of a motor attached to the handle bar or suspended from the top bar of the frame. It will weigh perhaps twice its present weight and will sell at its introduction at not more than \$250. This price will rapidly be lowered through fighting competition to a rock-bottom \$100, a figure that will appall no one. Its motor will doubtless be of the storage battery type and shorn of intricacies. Machine and motor will be built for rough usage, and one will need to be neither a millionaire to buy and house it, nor a mechanic to operate it. It will appeal to the masses. No cyclist of to-day will be content until he shall possess the "flying machine" of the twentieth century, wherewith he may ride the country over at his heart's content and with no thought of his physical limitations. We know that the country's cyclists are a legion to our millionaires' corporal's guard, considering which, the motor bicycle dawns upon us with a future far more promising than that held by the more loudly heralded motor carriage, or, as it is more widely known, the automobile.

The Officers of the American Steel & Wire Company.

At the directors' meeting of the American Steel & Wire Company, held February 20, the following officers were elected:

J. W. Gates, chairman.
John Lambert, president.
Wm. Edenborn, first vice-president.
I. L. Ellwood, second vice-president.
P. W. Moen, third vice-president.
S. H. Chisholm, fourth vice-president.
A. Clifford, treasurer.
T. P. Alder, assistant treasurer, New York.
F. L. Watson, assistant treasurer, Chicago.
C. S. Roberts, secretary.
F. E. Patterson, assistant secretary, New York.
O. Owen, assistant secretary, Chicago.
C. A. Honecker, auditor.
C. A. Vogt, assistant auditor.
Wm. P. Palmer, general manager.
Pam. Calhoun & Glennon, general counsel.
A. M. Crane, assistant to chairman.
J. S. Keefe, general traffic manager.
C. L. Miller, general superintendent.
F. H. Daniels, chief engineer.
E. E. Stone, general purchasing agent.
Chas. T. Boynton, general sales agent.
H. S. Smith, assistant general sales agent, Chicago.
D. A. Merriman, assistant general sales agent, Chicago.
T. H. Taylor, assistant general sales agent, New York.

District Managers:

Charles Ralet, manager, Worcester.
H. G. Stoddard, assistant manager, Worcester.
F. E. Patterson, manager, New York.
W. H. Rowe, manager, Pittsburgh.
J. H. Price, assistant manager, Pittsburgh.
S. W. Tener, assistant manager, Pittsburgh.
A. T. De Forest, manager, Cleveland.
Robert Ney, assistant manager, Cleveland.
J. H. Early, assistant manager, Cleveland.

H. W. Waite and A. H. Ranlet, having sold their interests in, and withdrawn from Richards & Co., incorporated, announce that they have formed a copartnership under the firm name of Waite, Ranlet & Co., for the purpose of transacting a jobbing business in tin plate, sheet iron and metals, sheet copper, sheet zinc, wire and tinners' supplies generally. They have secured the store and office, 80 and 82 Broad street, Boston, Mass.

United States Consul Robert P. Skinner, at Marseilles, reports that owing to the short output of the Welsh coal mines there is an opening for American coal in France. The present conditions permit of the importation of 60,000 tons of coal into French ports in the Mediterranean.

A Model Factory Building.

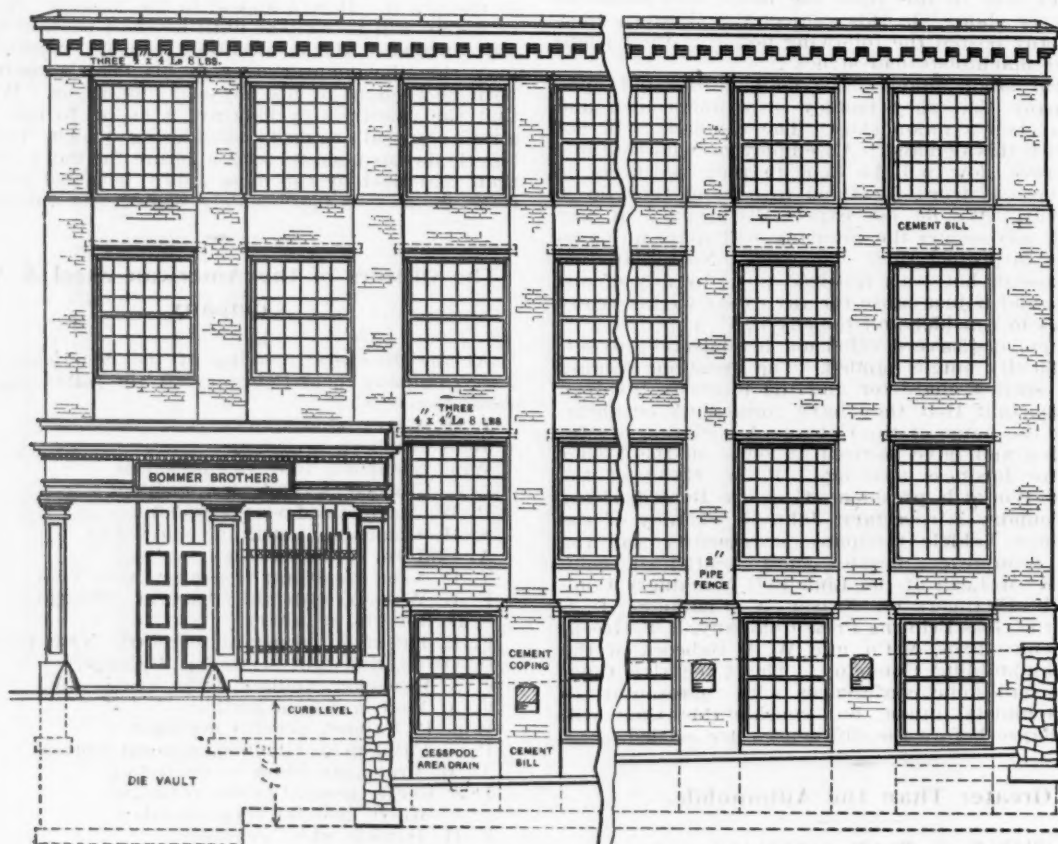
New Works of Bommer Brothers, Brooklyn.

The new factory of Bommer Brothers, 257-271 Clason avenue, Brooklyn, manufacturers of spring hinges, may be considered a most excellent type of the so called slow burning construction. A strict compliance with the building inspection laws and the requirements of the Board of Underwriters has resulted in a building upon which the insurance premium is 10 cents, which is the least possible. This result is attained not only by reason of the design and materials of construction, but also by the fact that the building is provided with the best appliances known for the prevention of fire and for meeting all danger of its spreading from floor to floor.

Special attention was also given to the securing of

the top of the upper sash is on a level with the ceiling. The upper two-thirds of each window in the basement and the lower two-thirds of each window in the upper parts of the building are glazed with prismatic glass, which further diffuses the light through the rooms and at the same time prevents the employees from having their attention attracted by passing objects.

The accompanying drawings show the principal details of construction. The foundations are of concrete, upon which rest cast iron shoes supporting the wooden posts, which are yellow pine varying from 10 x 10 inches in the upper story to 16 x 12 inches in the basement. The floor beams are of yellow pine 12 x 14, supported by cast iron bearing plates in the walls and by cast iron caps at the posts, as shown by Figs. 6 and 7. The floor consists of 4 x 6 yellow pine, with a diagonal covering of maple 1½ inches thick, as indicated in Fig. 3, interlined with water proof building paper.



Front Elevation.

A MODEL FACTORY BUILDING.

great strength, the entire structure being exceptionally heavy, and allowance being made in the plans for two more stories, which may be erected when needed. The building was designed by William Bonner, J. G. Glover collaborating. William Bonner also supervised the construction, and his wide experience in the fire insurance building inspection departments and his training as engineer enabled him to so plan as to achieve the results just named.

The north wall, to the left in Figs. 1, 2 and 3, is provided with bearing plates ready to receive girders for the contemplated extension of 60 x 100 feet on that side. The elevator, store house and washrooms are placed in their present location along this wall in order that they may be central for both sections of the factory. In the same manner the power transmission, or boiler and engine rooms, are also laid out so that they will be as near as possible central to the two sections.

Next in importance was the matter of light, and in order to secure the maximum amount the pliers were designed of great strength but as narrow as possible, the windows being 6 feet 8 inches wide and arranged so that

The power equipment consists of 2 boilers of 80 horse-power each, designed to carry 125 pounds, located in a separate fire proof building to the east of the main structure, as shown in Figs. 8 and 9. The steam pressure is automatically controlled by a system of forced draft regulation which permits the burning of soft coal without smoke. For this purpose a 24-inch tunnel connected with the blower, which is located in the engine room, leads to the ash pit of each boiler. A 125 horse-power Watts-Campbell engine furnishes the power. This is arranged so that when the new wing is added the engine may be compounded so that a total of 200 horse-power may be developed. Power is transmitted directly from the head shaft to the main shaft in the basement, and then through a vertical drive to each floor. An idler is placed on each floor so that the power on any particular floor may be stopped without interfering with that of any other. The openings through the floors for the belts are protected with heavy metal hoods, so that there are no openings whatever to permit currents of air to circulate. These hoods are also intended to prevent the spread of fire.

In the plating room a special cement trough, Fig. 10, has been constructed in which all drippings flow, and after passing through a settling tank are led to the sewer. This trough is covered with loose planking which provides for its easy inspection and cleaning.

A driveway, Figs. 1 and 3, is arranged so that in making or receiving shipments the trucks are under cover and the sidewalk is left perfectly clear. Underneath this driveway, Fig. 2, is the fire proof vault for dies and special tools, the floor of which is lowered and arrangements made for flooding the department in order to preserve the temper of the dies in case of fire.

To guard against fire the building is equipped with Manufacturers' automatic sprinklers, wet pipe system, supplied from a 10,000 gallon tank placed 17 feet above the roof, and from the public water supply at 40 pounds pressure through a 4-inch main. A T has been put in

are in a fire proof, ventilated vault under the entrance steps.

The plant is lighted by electricity, furnished by a dynamo in the engine room, gas being held in reserve in case of any break down.

A complete interior telephone system, embracing 12 stations, and also the eco-magneto system, having 12 night watchman stations, have been installed.

The United Verde Copper Company.

A statement has been issued relative to the business done by this famous Arizona copper mine during the last year.

In 1899 the company's output was 43,290,590 pounds of blister copper. Receipts from copper were \$5,775,621, which figures an average price received during the year of 13.3 cents per pound. The total operating expenses,

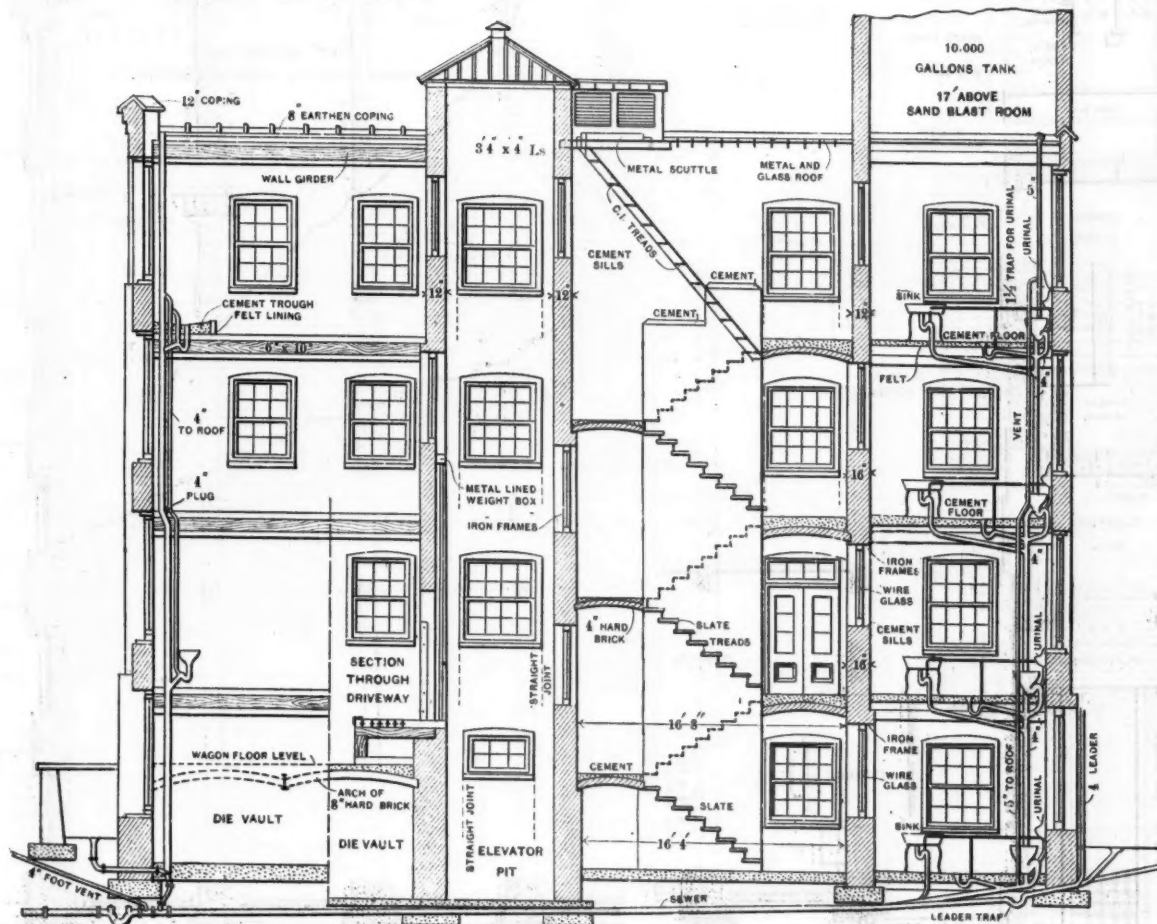


Fig. 2.—Section Front to Rear at North End.

A MODEL FACTORY BUILDING.

the main piping in the basement so that the 500-gallon per minute Underwriters' pump may be connected to the system. This pump is to be supplied from a 45,000-gallon cistern. The stairway, Fig. 2, is of metal, with slate treads, and all the doors of both elevator and stairway are of the fire proof automatically closing type. The wash-rooms shown in section in Fig. 2 have cement floors with open sanitary plumbing in order that hose may be turned on when necessary and all parts thoroughly flushed.

The polishing room is equipped with the latest improved system for exhausting the dust and refuse, which is deposited in the coal bunkers and thence consumed with the fuel.

The elevator machinery is arranged in a specially constructed room under foot of stairway, obviating the usual disadvantages incidental to this class of machinery. Gas and water meters, sewer traps and main valves

including construction, were \$2,660,346, and, excluding construction, \$1,859,236. The gold and silver values obtained in the course of mining amounted to \$598,538, which can be legitimately placed to the credit of operating expenses. Excluding construction and precious metal values from the operating expenses of 1899, we have a net cost of \$1,260,688, or 3 cents per pound, a figure unapproached by any copper mine in the world. This cost of 3 cents per pound includes freight and depreciation, which last year totaled \$646,390. The company rightly include this construction as an operating charge, and with this inclusion (gold and silver values deducted) the net operating cost was \$2,061,808, or 4.8 cents per pound. It will also be remembered that all construction work was unusually expensive in 1899 by reason of the high price of wages and materials.

The contract for the rapid transit tunnel in New York City was signed on Saturday. John B. McDonald, the contractor, expects to begin the work of construction about the middle of March.

times has provided that eight hours shall constitute the maximum of employment for labor in the Government service.

that the service and employment of all laborers and mechanics who are now or may hereafter be employed by the Government of the United States, by the District of Columbia, or by any contractor or sub-contractor, upon any of the public works of the United States, or said District, is hereby limited or restricted to eight hours in any one calendar day. A penalty is provided for an intentional violation of this act. This legislation was plainly such as it was legal for Congress to enact, as it has full control under the Constitution of its own property and in no degree did such legislation interfere with the private rights of a citizen of the United States.

"It will be noted that the labor treated of is on the public works of the United States. The term 'public works,' is well understood as meaning all fixed works of civil engineers for public uses, as railroads, canals, water

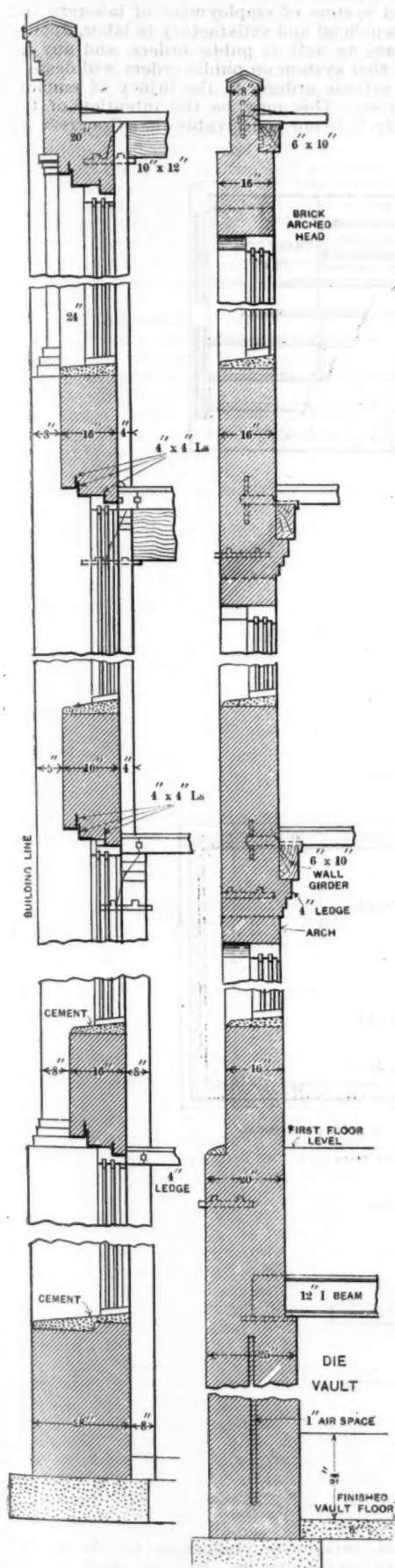


Fig. 4. - Section through Front Wall. Fig. 5. - Section through North Wall.

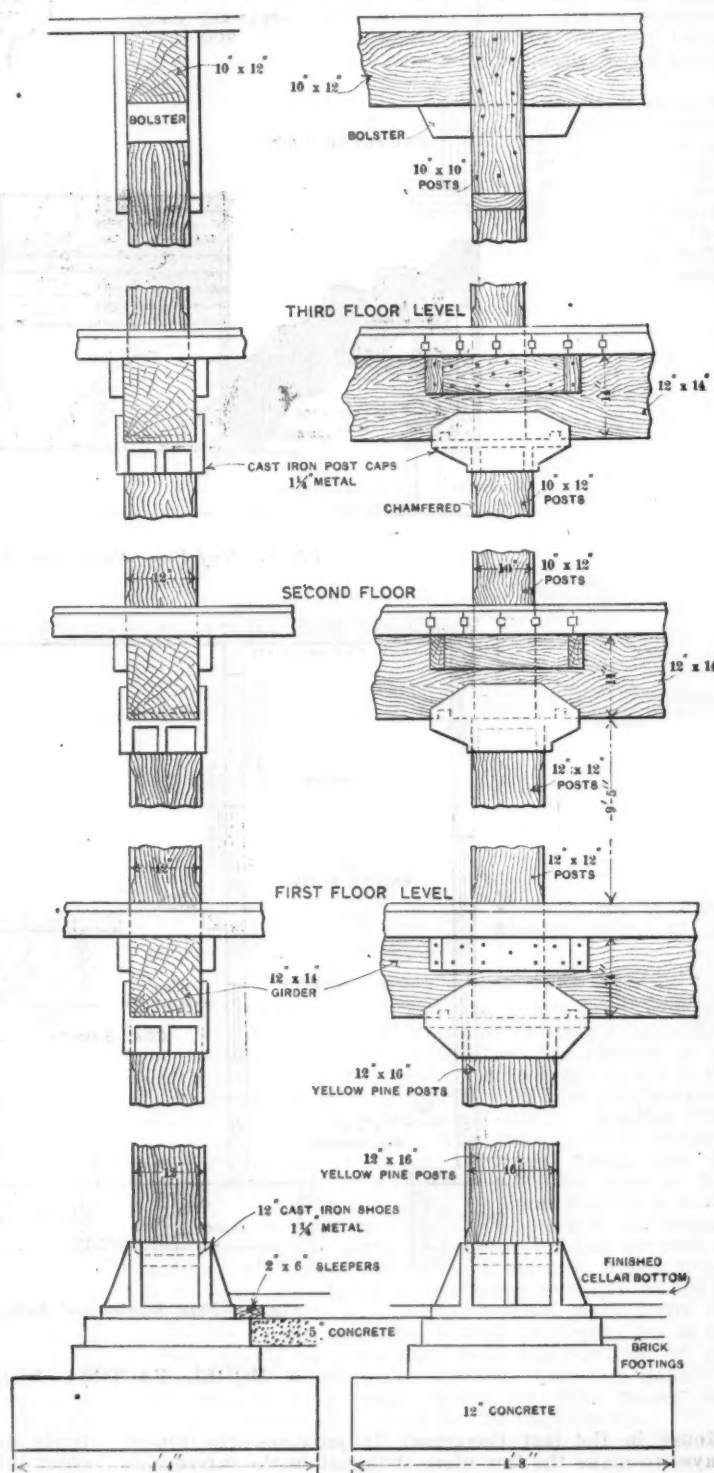


Fig. 6. Details of Posts and Floor Beam Connections. Fig. 7.

A MODEL FACTORY BUILDING.

"The last statute on the subject of limiting the service of laborers, &c., to eight hours, is the act of August 1, 1892 (27 Stat. L. 340), which provides in brief

courses, roads, &c., but strictly military and civil works constructed at the public cost. There are other public works than those specified, but they all possess the char-

acteristic common to those particularly described. The purpose of enforcing an eight hour law on public works was within the proper scope of legislative action. The subject matter was wholly within Government control and the application of the eight hour principle did not interfere with any private interest and no citizen suffered thereby except possibly the mechanic whose hours of labor and probably his wages were curtailed to his injury.

"Now what was the object of the bill passed by the

rights and business is permitted to go through without an adequate comment, either written or oral, by the committee of the House.

"The present system of employment of laborers and mechanics, so beneficial and satisfactory to labor, applies equally to private as well as public orders, and any interference with that system on public orders will destroy the system on private orders, to the injury of employers and employees. This may be the intention of the bill, but certainly it is not conceivable that Congress in-

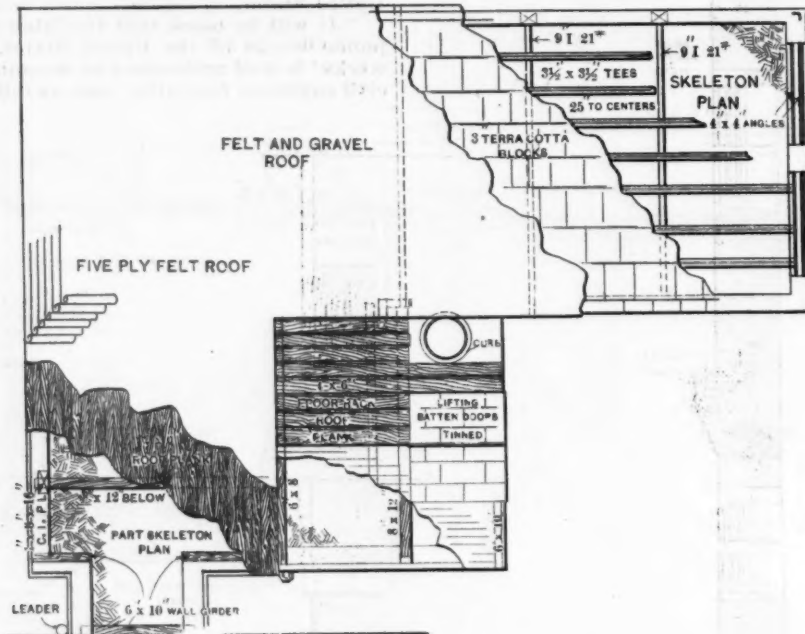


Fig. 8.—Roof Plan, Engine and Boiler Rooms.

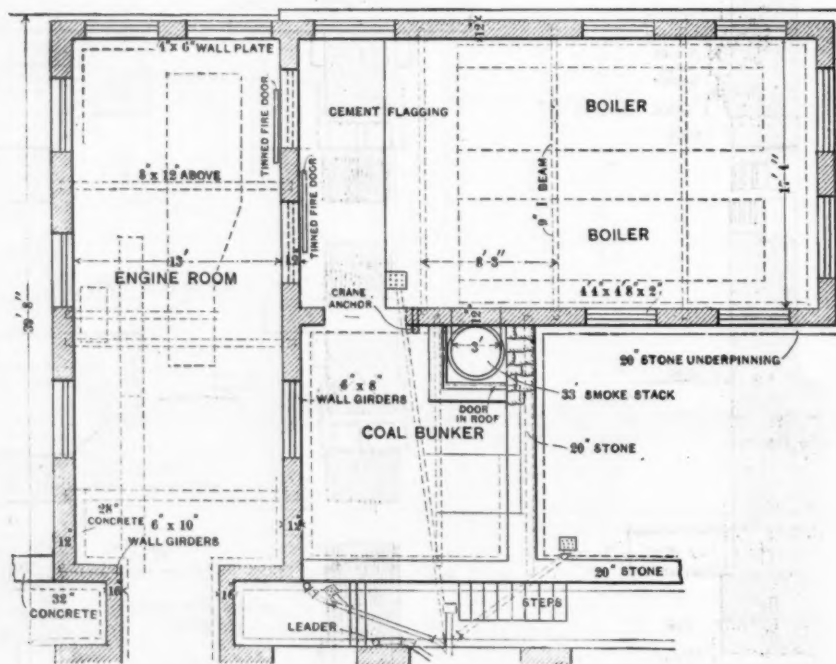


Fig. 9.—Plan Engine and Boiler Rooms.

A MODEL FACTORY BUILDING.

House in the last Congress? It promises—the report says—to make the law more stringent in the interest of labor, but words are introduced in the bill adding to and changing the character of the beneficial legislation heretofore enacted by the act of August 1, 1892, and by attempting this the domain of private enterprise was proposed to be invaded; but it will be noticed that the report makes no marked reference to the radical change or to the introduction in the bill of the words 'or work done for the United States,' &c., nor to the second section of the bill, nor do any of the reports of the heads of departments or bureaus which were unfavorable to the bill. And this attempted interference with private

tends to penalize persons or companies for daring to enter into Government contracts. It is an effort to enforce paternalism in the most objectionable way. Limited confiscation might result, inasmuch as those individuals or companies who will not contract, in case this bill becomes a law, will thus be deprived of legitimate business and profit and the use of valuable specialized plants.

"Then again, the second section of the bill provides that all contracts with the United States shall stipulate that no laborer, &c., in the employ of a contractor or subcontractor shall be permitted to work more than eight hours in any one calendar day; all this notwithstanding

the fact that the product under all contracts except that on public works (as hereinbefore defined) does not become the property of the United States until delivered to the United States at the completion of the article contracted for. This principle was laid down by the Supreme Court in the case of *Clarkson vs. Stevens* (105 U. S. 505). The court held that there is no legal method by which the United States could be compelled to take the product of a contractor until full completion and acceptance, as no title vested in the United States until these precedent conditions were fulfilled.

"Such an effort as the bill proposes can only have one of three results:

"1. Largely increased cost of products and articles to the United States.

"2. A quasi confiscation of establishments heretofore contracting with the Government and refusing to contract further in the event of such a proposed act of Congress.

"3. The penalizing of such individuals or establishments as may agree to contract after the passage of such an act, by compelling them to adopt the eight hour system on their private as well as public business.

"The first section of the bill as originally reported to the House ended with the language, 'except in cases of extraordinary emergency caused by fire, flood or danger to life or property.' As this language did not include a state of war, the further clause was added, 'nor upon public military or naval works or defenses in time of war.'

"The history of these clauses shows how extreme

cided by the courts to be unconstitutional, as interfering with the personal liberty of the citizen, where such citizen in so laboring was not interfering with the rights or privileges of any other individual or with the public welfare. It should be remembered all through this discussion that the public interest is involved in the subject matter of the proposed legislation, so there is no justification on that score.

"Another word only will be added on the merits of the bill. The passage of this bill would necessarily demoralize the work done under private contract. A manufacturer, in the sharp competition of the present day, must deliver manufactured articles quickly. He therefore may use his men as he sees fit, with their consent. If he takes a Government contract, however, he can, under this bill, only work his men on Government orders eight hours a day, and he will be necessarily forced to reduce the hours of labor on private orders being filled during the same period to eight hours. His competitors exclusively in private lines can go on working their men ten hours a day or more with certainly better present results.

"Taking everything into consideration, it is evident that the interests of many of the most important manufacturing concerns would be injured by the passage of this act. In the world's competition for foreign trade, the cheapest product must secure the market. Any effort by Congress to indirectly reduce the hours of labor, as contemplated by this bill, must militate against the manufacturing interests of this country, compelling them ultimately to do work and produce results at a disad-

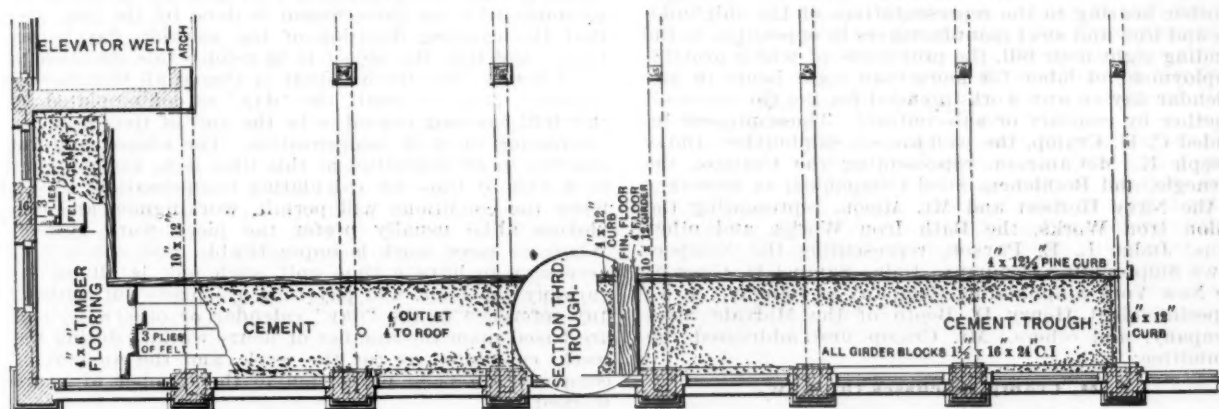


Fig. 10.—Cement Trough in Plotting Department.

A MODEL FACTORY BUILDING.

were the demands of labor representatives, inasmuch as only by force of circumstances were they willing to add the last clause. Having added that clause it is not apparent why the exceptions should not cover private military or naval works. Then again the exception applying only to public military or naval work, the Secretary of the Navy or the Secretary of War under the third section of the bill would make himself liable to a fine or imprisonment, or both, if he should contract or permit a private contractor to employ laborers or mechanics for more than eight hours in any one calendar day even where the exigency was extreme and the life and safety of the nation depended on long hours of labor, although the same Secretary would be within the positive permission of the law when directing laborers or mechanics on public military or naval works or the defenses in time of war to labor more than eight hours in any one calendar day.

"The bill also proposes to interfere with the right of laborers, workmen and mechanics employed on the work done by private parties for the United States other than on public works to work more than eight hours in any one calendar day. This restriction is not a hardship in connection with Government works, inasmuch as the Government simply says to its laborers: 'We do not want you and will not permit you to work more than eight hours a day on the public works, that being the policy of the Government,' and under this policy there is no interference with individual rights. This bill, however, will undertake to say to laborers and mechanics in private establishments: 'If you do one hour's work a day on a Government contract, you shall not work more than seven additional hours on private orders, or, at another time, you shall not be permitted to work more than eight hours a day on a Government contract.' The attempt of Congress to interfere with the free exercise by an individual of his right to labor more than eight hours in any one calendar day would be de-

vantage in competition with manufacturers in other parts of the world beyond the paternal control of the Congress of the United States."

Judge Payson's Statement.

Judge Payson addressed the committee, declaring that the effect of the bill would be to bring shipbuilding and steel making plants throughout the country to an eight hour basis if they desired to have any share in the Government work. Such plants would be discriminated against in favor of other plants which refrained from giving the Government the advantage of their competition for Government work, the result being that the United States would ultimately be called upon to foot the bill. No matter how large the plant may be it would be difficult to carry on Government work in one department and private work in another for the purpose of avoiding the logical operation of the law, which would be to force everything to the same level. It would be impossible to pay a man who worked eight hours the same pay as the man who worked ten hours, but at the same time if he were only paid eight-tenths of the amount you would make friction. Laborers generally preferred to work longer hours for more money and would go where they could get the opportunity.

Mr. Payson attacked that provision of the bill which limited to eight hours the labor to be done on articles contracted for, but not yet delivered to the Government. He maintained that Congress had no right to say to a manufacturer that he should not labor more than eight hours a day upon an article simply because he had contracted to deliver it to the Government. Congress had the right, he thought, to say that upon a public building labor should only be employed a certain number of hours per day, but the Constitution gave no such power as to merchandise of any description the title of which had not yet passed to the Government. Ships, guns, armor plate, &c., manufactured for the Government do not

become the property of the United States until they are inspected and thoroughly tested and after a formal acceptance. In many cases a great deal of work may be done upon a quantity of metal before it is determined whether it is to be delivered to the Government or not, and under the terms of the bill if this work were done in excess of eight hours a day the persons permitting it to be done would be liable to the penalties prescribed.

Continuing, Mr. Payson pointed out that the bill would not only cover labor employed in manufacturing, but also in transportation and would make endless trouble for the United States in the transportation of material, the running of trains, boats, &c. The bill was as broad as language could make it, Mr. Payson contended, and embraced every possible contract that could be imagined. Whether he was employed by the piece, or by the hour, or by the day, no laborer could work in excess of eight hours and the character of his employment made no difference, provided he was engaged in work for the ultimate advantage of the Government. If this was proper legislation Congress might with equal propriety step in and say to men working on their farms that eight hours should be the limit of their day's labor. Certainly if the farmer was working to supply the Government under contract he would be amenable to this law.

After Judge Payson had concluded his argument, Mr. Jennings spoke against the bill, and was followed by Captain Randle, who also opposed it. Hamilton Carhart, a clothing manufacturer of Detroit, Mich., then spoke in favor of the bill, declaring that the eight hour day worked well in his business.

The House Committee on Labor on the 23d inst. gave another hearing to the representatives of the shipbuilders and iron and steel manufacturers in opposition to the pending eight hour bill, the provisions of which prohibit employment of labor for more than eight hours in any calendar day on any work intended for the Government, whether by contract or sub-contract. Those present included C. H. Cramp, the well-known shipbuilder; Judge Joseph K. McCammon, representing the Cramps, the Carnegie, and Bethlehem Steel Companies; ex-Secretary of the Navy Herbert and Mr. Micou, representing the Union Iron Works, the Bath Iron Works, and other firms; Judge L. E. Payson, representing the Newport News Shipbuilding Company; Judge Samuel H. Gray of the New York Shipbuilding Company of Camden, N. J.; Superintendent Henry D. Booth of the Midvale Steel Company, and others. Mr. Cramp first addressed the committee:

C. H. Cramp Discusses the Law.

"If the proposed action of Congress as outlined in this bill were to be taken at the request of the parties principally concerned—the employed and their employers—its consequences would still be sufficiently grave to give pause to every wise and farseeing statesman; because violent revolutions, no matter what their object may be, are always destructive. But this bill is based upon no such joint request of the parties principally concerned. It is not desired either by the great mass of those employed or by those who employ. It is framed and pushed by a class of men who do not work or employ; but who arrogate to themselves the attributes of employer and employee alike—we may call them self-constituted mediators—and whose sole occupation is known as 'agitation.' Of course these mediators pretend to 'represent' those who work. They may in a certain sense 'represent' the sub-agitators who control the unions; but I deny they represent the mass of those who do honest work for honest pay.

"It is well known that but a comparatively small minority of the total mass of wage earners belong to unions. No farm labor is included in such organizations. Yet under this bill the Government could not contract for hay, grain, flour, meat, or any other supply of food or forage unless produced by farm labor working 'not more than eight hours in any one calendar day.'

"If suggestion be offered that this could be obviated by amendment excluding farm labor, then the answer would be that such exclusion is a shameless confession on the face of the bill itself that it is class legislation of the most shameless character. The professional mediators are never satisfied. If they accomplish one thing, then, unless they can find something else to agitate their occupation is gone. Unless they can make the unions constantly believe that they are going to do something new, their occupation would be gone and they would have to go to work or do worse.

"Among the coercive characteristics of this bill is the fact that it proposes to coerce non-union workmen at the behest of those who belong to unions. If any public man dares to expose such fallacy or condemn such outrage, the agitators threaten him with political destruction through the voting power of the unions. Thus the agitators seek to coerce Congress to pass a law to coerce workmen who do not belong to unions. It is not neces-

sary to speak of coercing those who employ workmen. The issue may safely be left as between the minority of workmen who are fettered by the unions and enslaved by the agitators and the majority who are free from both.

"Under the provisions of this bill, which extend from contractor to sub-contractor, it would be impossible for the Government to buy any of the supplies which it requires unless every industry furnishing such supplies could be compelled to produce them under the restrictions of this bill. Take, for example, any list of supplies procured from time to time for the use of Congress alone, which is a very small item in the expenses of the Government, and it will be readily seen that every article mentioned in such list is the product of an industry in whose general business the patronage of the Government constitutes but an insignificant fraction. Yet it would be unlawful under this bill for agents of the Government to receive any of these supplies unless they had been manufactured by persons working not more than eight hours in any one calendar day. Extend this to all the other branches of the public service, particularly in the Department of War, the Navy, the Interior, and the Post Office, and it must instantly become apparent that this bill, if enacted, and enforced as law, would at once paralyze all sources whence the Government now draws its supplies of material of all descriptions for current use, the list ranging in importance all the way from battle ships to lead pencils; but this short résumé by no means exposes the leading fallacies of the bill.

"A glance at its text, or an examination of the record of debate on it in the last House of Representatives, would produce the impression that all work in industries patronized by the Government is done by the day, and that the existing duration of the working day is ten hours, and that the object is to reduce this duration to eight hours. The truth is that in almost all branches of industry, great or small, the 'day,' as contemplated by this bill, has long ceased to be the unit of time used for calculating rates of compensation. The almost uniform practice in all industries at this time is to use the hour as a unit of time for calculating compensation, except when the conditions will permit, workmen and employers alike usually prefer the piece work system. Wherever piece work is impracticable, and where it is necessary to have a time unit, such unit is almost invariably the hour, and pay rolls are made out without any reference to the 'day,' calendar or otherwise, and are based upon the number of hours worked during the week, calculated as for the week, and the amount of compensation is in proportion to the number of hours worked.

"From this it will appear that the term 'day' as applied to working hours, is not used as the unit for determining compensation, but merely as a measure to regulate the difference between normal pay and overtime pay. Such are the advantages of the hour system, which not only puts the employer and employee on the most equitable footing, but it also gives the employee a much larger scope of freedom than the day system as formerly used and as contemplated by the bill under consideration. It will be readily apparent from the foregoing exposition that the effect of the bill upon workmen engaged in those industries which are particularly patronized by the Government would be to place a limit upon the matter of hours that they may work out of any 24.

"It must be apparent that the proposed legislation is not in the interest of the men who actually work. It has been shown that it is based upon a total misconception of the conditions under which industrial work is carried on. Instead of guaranteeing freedom of action to the workman, it takes freedom away from him. Instead of permitting him to make the best use of his time in his own discretion it prescribed limits which arbitrarily cripple his skill and deprive him of the free use of his time and opportunities. The men who work have not asked and do not ask for this kind of legislation the effect of which would be to cripple and destroy the industries to which the workmen themselves look for employment and livelihood.

"Thus far we have considered the effect of the pending bill only with regard to the interests of the workmen themselves, and have arrived at the plain conclusion that it is not calculated to promote their welfare. We now come to consider its effects upon the interests of the Government. With exceptions too trifling to be considered, the entire business of the United States Government, so far as it involves industry, is done by contract. This applies to every Department and embraces the whole range of materials and supplies required by the Government for its current use in every particular.

"It has already been pointed out that under the sweeping provisions of this bill no work could lawfully be done for the Government on any other plan or system than by day's work of eight hours only. Is it proposed to apply this

system to the railroad companies which carry the United States mails by contract; to the mines which furnish by contract the coal for its steamships and for its other uses; to the paper mills which make its supplies of printing paper and departmental stationery; to the steel mills which manufacture materials for its ships of war, or make forgings for its artillery or projectiles? And if so, and even granting that for the sake of doing business with the Government some manufacturers or producers might be willing to undertake the trouble, confusion and expense incident to a double organization, even the first and immediate effect of the application of this bill would be to add from 25 to 50 per cent. to the normal contract price of everything that the Government has to buy.

"As it has already been shown that the bill under discussion is calculated to injure rather than help workmen themselves, and as it is practically clear that its operation, even if it could operate at all, would be to largely augment the cost of everything the Government has to procure, it would seem difficult to find any valid reason for the enactment of such a law.

"In conclusion I desire to refer to a remark made rather parenthetically at an earlier point, to the effect that wherever the conditions will permit, workmen and employers alike usually prefer the piece work system, &c. I desire to amplify this by saying what must be apparent to every sensible man, that piece work, where practicable, is the most advantageous of all systems to the wage earner; because it gives every man the full benefit of any superior knowledge, skill, diligence and strength that he may possess; and in many cases men operating on piece work will make a day and a half or two days' wages in one; or, if they do not desire to work a full day, they sometimes set a limit of their own to the amount of work they will do, commonly called a 'stint,' and when that has been accomplished they quit for the day.

"This system, I might add, is bitterly and often savagely opposed by the unions, because it is opposed to the fundamental and bed rock theory of their organization, which is that all labor should be brought down to one common level; that is to say, that a workman of superior skill, diligence, knowledge and power should be brought down to the level of the most inferior workman so far as rates of wages and working time are concerned; or, in other words, to coerce the good workman into a condition that compels him to make up at his own expense of time and toil for the shortcomings or the carelessness or the inefficiency of the inferior man. This, so far as the workmen themselves are concerned, is undoubtedly the most iniquitous and vicious of all the objects of the union plan. The unions for the same reason and to accomplish the same purpose equally to what is known as sub-contract work in large establishments, which is in fact an enlargement of the piece work system.

"Finally, the eight hour and ten hour systems cannot be made to operate together for mechanical and administrative reasons which are self-evident. Every manufacturer knows that any effort to merge the two systems or work more than one system side by side would end in a destructive failure. The history of great ship-building enterprises from comparative small beginnings shows one of the most wonderful manifestations of the nineteenth century spirit. If, however, in the evolution of these enterprises, they had been threatened with adverse legislation similar to the bill under discussion, no such progress as has been made would have been possible."

Remarks of Henry D. Booth.

Henry D. Booth, superintendent of the mechanical departments of the Midvale Steel Company, then addressed the committee. He said that his firm was vitally interested in any proposition that affected Government work. At present from 35 to 40 per cent. of the output of the Midvale plant was Government work, consisting largely of heavy gun forgings, &c. In his opinion it would be impracticable to attempt to run part of the plant on an eight hour basis, and if the bill became a law the company would be obliged to install the eight hour system throughout its works. Continuing, Mr. Booth made a very interesting statement concerning an experiment which the Midvale Steel Company attempted with the eight hour system which it had put in force experimentally, but which was abandoned after three months at the earnest and repeated request of the workmen. The men sent several deputations to the officers of the company complaining of the eight hour system, emphasizing especially the fact that they were able to earn less money and that one shift of men was obliged to begin work at midnight. Under the ten hour system two shifts were worked very satisfactorily and plenty of time was given to clean fires, wash up and make ready for the incoming shift. Under the eight hour system these preparations had to be made

during the time of the shift itself, and the productive capacity of the men and machines was thereby materially reduced.

In discussing the difficulty of separating Government from commercial work, Mr. Booth said that in melting steel especially it could not be determined at the outset whether the steel would go into Government work or commercial work, as it might prove too hard or too soft for the particular use for which it was intended, and at the same time might be excellent for some other use. The melting of steel was conducted in a very large department and if placed on an eight hour basis that system would have to be enforced throughout the works.

"If this bill became a law," said Mr. Booth, "we would be obliged to decline to compete for Government work, even if we were under the eight hour system ourselves, because we could not contract for raw material. The concerns furnishing this material would be obliged to refuse to sell us because they would have to go on an eight hour basis themselves."

Referring to the experiment made by the firm with the eight hour system, Mr. Booth said that the output of an eight hour shift was more than 20 per cent. less than that of a ten hour shift, chiefly because the time of cleaning up and other preparations was taken out of each of three shifts instead of two shifts per day. Chairman Gardner remarked that this was undoubtedly true, as if the preparations took a half hour it was clear that 30 minutes would be a greater proportion of eight hours than it would be of ten hours. Continuing, Mr. Booth said that nearly all the work was done on a piece work basis, which was greatly preferred by the workmen. In the steel trade the workmen found themselves able to develop and maintain their highest degree of skill for ten hours. A longer work day would prove disadvantageous and a hardship on the men, but a shorter day simply deprived them of the opportunity of working to a fair limit of their strength and skill and thereby reduced their earning capacity more than 20 per cent.

Concerning the piece work basis of employment, Mr. Booth said that workmen generally throughout the trade preferred it to the hour or day system. If they were ambitious it gave them an opportunity to attract attention to themselves by the amount and excellence of their output, and it opened a way to speedy promotion. Replying to a question by ex-Secretary Herbert, Mr. Booth said that the rejections were less on a piece work basis than on time work, as each man strove to turn out acceptable work and the total force was therefore working co-operatively. The average daily wages of all classes of workmen, including day laborers, was \$2.09 in the Midvale Steel Company's plant. Yard laborers received \$1.15 per day for the simplest kind of work, while as much as \$7.50 per day was earned by men of the highest skill, including perhaps 25 employees. From 500 to 600 men earned from \$3.50 to \$5 per day. The average per diem piece work at present was about \$3.25.

Replying to inquiries, Mr. Booth said that he had no personal knowledge of the affiliation of his men with unions. The company took no means to find out whether the men belonging to churches, clubs or unions, but always dealt with them as employees. They had never had a strike nor any serious labor trouble of any kind. The men were uniformly contented and as evidence of their prosperity, Mr. Booth said that the employees of the company had established a savings fund which at the present time amounted to \$17,000. The details of making deposits and keeping accounts of this fund were cared for by a clerk of the company, who deposited in a local bank whatever proportion of wages the men desired to save, and the bank books were kept in the office of the company where they could always be inspected by the men.

As to changes in rates of wages, Mr. Booth said that in 1895 the depression in business forced a decrease of from 5 to 10 per cent., but this was restored about 18 months ago. The average daily earnings had since increased considerably owing to the receipt of orders, and also because of labor saving machinery introduced which enabled the men to increase their output.

The committee then adjourned to meet on March 1, when ex-Secretary Herbert will be heard in opposition to the bill.

W. L. C.

The Electrical Lead Reduction Company of Niagara Falls have extensive improvements in contemplation. This concern are located on the property of the Niagara Falls Power Company, and secure their electric power from that company. Their present facilities are such that they have been turning out about 1 ton of sponge lead a day. Orders have been placed with the Westinghouse Electric & Mfg. Company for machinery and apparatus that will allow the company to turn out about 10 tons of their product every day after the plant has been enlarged. It is expected that the improvements will be completed in about six months.

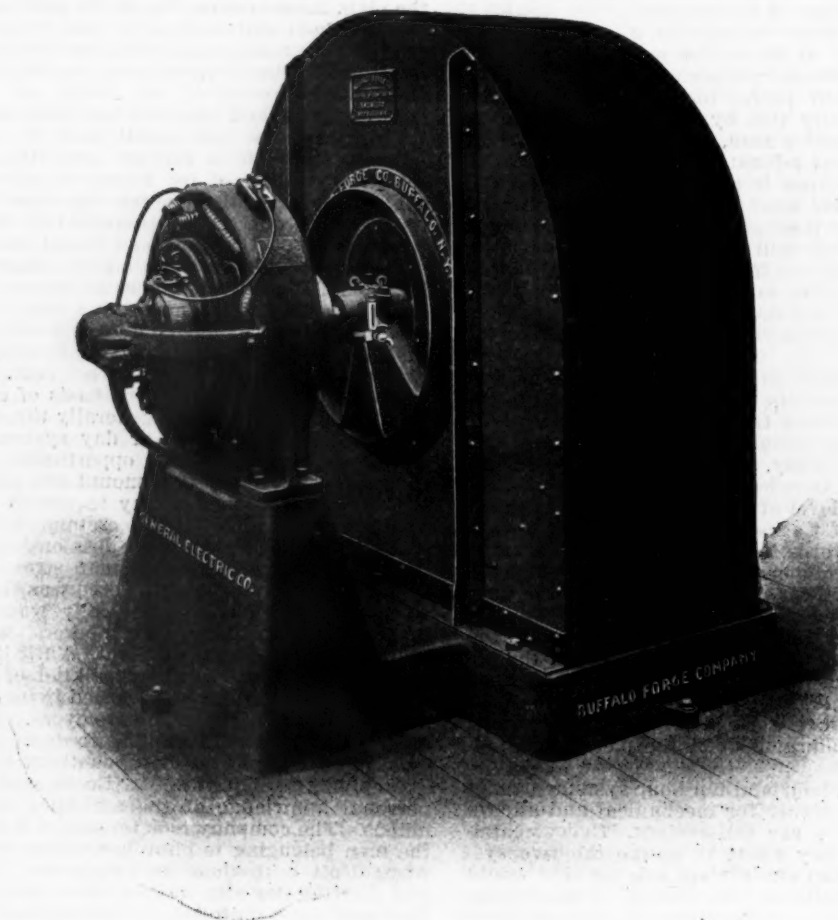
The Buffalo Electrically Driven Fan.

The accompanying engraving illustrates a type of electric fan manufactured by the Buffalo Forge Company of Buffalo, N. Y. It is driven by a General Electric direct connected motor, and both fan and motor are mounted upon a cast iron sub-base. This gives a very compact and stable unit, and possesses the advantage over the arrangement of having the motor mounted in the housing, in which case running at high speeds the vibrations ultimately cause more or less play, thus destroying alignment. The fan wheel is overhung and the single bearing next to the motor is of the oil ring type to secure the positive lubrication which is necessary under high speed conditions. The absence of a bearing on the inlet side is a desirable feature, in that it facilitates pipe connections when the fan is used as an exhaustor when handling hot air and gases, as it is desirable that they do not flow in direct contact with a bearing.

them. A desirable feature in connection with the brush holders is that they are provided with a flexible connection to the brushes, thus allowing a free movement of the brush in the holder, and avoiding resistance due to imperfect contact.

Central Pennsylvania News.

HARRISBURG, PA., February 26, 1900.—Dullness in some places and activity in others about describes the condition of the iron and steel industry in this district during the past week. All of the mills were in operation, and in some cases they were run to their fullest capacity. There are enough orders to keep things moving steadily during the next few months, but there is more or less uncertainty about the period beyond the first half of the year. There is no doubt that the top notch prices have to some extent retarded production in certain lines. There is still going on a process of adjustment, and until



THE BUFFALO ELECTRICALLY DRIVEN FAN.

The material of the fan blades is heavy steel plate, and the spider is of malleable iron. Rigidity is given the fan construction by riveting conical side plates to the blades, which extend from inlet to circumference.

The housing is made in a very substantial manner of heavy plates, and where increased stiffness demands angle iron braces are used. These fans are widely used for electric transformer work, and for this service a damper is provided at the outlet of the fan. It is operated by a chain from the outside, the object of the damper being to regulate the amount of air discharged, which in turn fixes the amount of power consumed in driving it to a certain extent. These fans have been furnished both for blowing and exhausting purposes, and when used as an exhaustor the inlet next to the motor is closed with a concave cap fitting closely around the shaft inside the housing. The inlet being on the side opposite the motor is an advantage in that the motor is thus protected from dust, which would be carried through it by rushing air currents. The motor is built to meet extreme variations of load, and is practically free from sparking, so that there is no wear upon the commutator aside from that due to friction, which, with carbon brushes employed for all voltages and sizes, is so slight as to be practically negligible. The armature is so constructed that currents of air are constantly circulating through the core and windings, thus thoroughly cooling

bed rock is reached in the matter of prices the manufacturers in this territory expect business to drag a little. There have been some heavy shipments from several of the plants, and a number of nice orders have been booked from distant points. For obvious reasons the iron and steel men here do not care to divulge at this time the sources of new business. Most of the plants in this section have remained outside the large industrial combinations, and they have pursued the policy of silence with respect to orders where publicity could in any way affect their interests adversely. It is known, however, that the plants here are booking enough orders to make a busy year reasonably certain. Prices have shaded off a bit here and there, but for the most part are firm.

During the week all departments of the Pennsylvania Steel Works were in operation. There was a particularly heavy output of slabs and blooms. A breakdown at the shears of one of the blooming mills limited the output of that particular mill for the week. Heavy shipments were made by the various other departments and the blast furnaces are producing heavily. Recently the company have been able to accumulate some fuel above the daily needs, and iron and ore are also coming in steadily. It has been decided to make the new machine shop, now under construction, at least 80 feet longer than was originally intended. Two large girders, each

100 feet long, and two cars of bridge iron were shipped Friday, the first to Richmond, Va., and the latter to Cleveland, Ohio. There were shipped to Havana, Cuba, 1500 tons of steel rails for a street railway in that city.

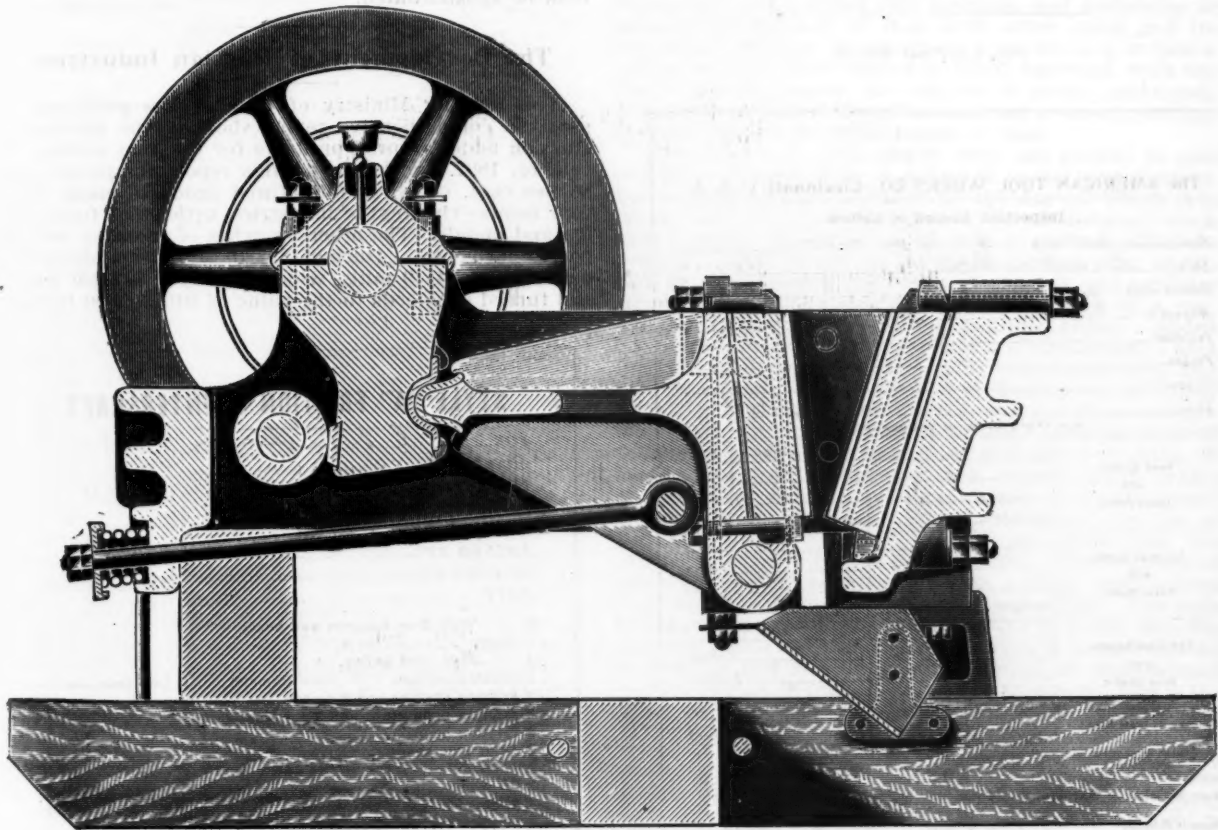
General Manager McCauley confirms the sale of the muck bar mill of the Central Iron & Steel Company at Herr street to the Pennsylvania Railroad Company. He says, however, that the alleged terms—\$25,000 cash and the erection of a new mill of like capacity at the main plant—are not correct. During the last week the Central Iron & Steel Company made a large shipment of water pipe to San Francisco and shipments of plates to other points.

The output of the tin mills of the Lalance-Grosjean Mfg. Company last week was the heaviest in the history of the plant in this city. The management here seem to have overcome an aggravating breakage of rolls. For five weeks the breaks in the rolls continued and the difficulty was finally overcome. There is now plenty of coal and coke and other supplies, and the prospects for a long and successful run are good.

All departments of the Middletown plant of the National Tube Company are in full operation, and it is understood that there will be no suspension of this plant

ways approximately at right angles with the stationary jaw.

A diagram of this crushing movement was made with the use of a full sized model, and showed in the course of one revolution of the fly wheel the toggle die moving forward along its entire face, but faster at the top than at the bottom for one-fourth revolution; then moving faster at the bottom than at the top during the next one-fourth revolution; then receding or drawing back for a fraction of a revolution, and the entire face of the die moving forward during the last part of the revolution. The crushing movement is practically a continuous one and is free from a dead center. This regularity of movement is so uniform and continuous that the material being crushed appears to settle down and go through the crushing chamber without stopping or pausing for an instant. Since the crushing movement is always at a right angle with the stationary die no stone ever gets out of the crushing chamber until reduced in size. The movement at the top of the crushing die is greater than at the bottom, which insures the stone being crushed to an even size. The size of the product is regulated by the number of plates back of the stationary die. The backs of the dies are planed and set on beds of zinc.



THE AULTMAN ROCK CRUSHER.

in the near future. The great demand for pipe of all kinds and the nearness of the Middletown plant to the Atlantic seaboard makes the operation of the Middletown plant profitable.

The Aultman Rock Crusher.

The frame of the rock crusher built by the Aultman Company of Canton, Ohio, is a solid piece of cast iron of sufficient size and weight to absorb all strains and any vibration caused by the rapid movement of the parts contained in it. The crushing movement is obtained by means of a cam or eccentric shaft contained in bearings which are a part of the frame and which actuate a pitman. The back of the pitman is supported by a roller bearing, and the pitman in the course of the motion imparted to it by the revolving cam shaft causes the crushing die to describe a peculiarly efficient crushing movement. By heavy T head bolts the moving jaw is attached to a member which is termed the toggle. The toggle with the die attached is swung from two hanger pins, one in each side of the crusher housing, proper relations being maintained by two hanger rods containing bearings for the hanger pin and the shaft passing through the toggle just below it. The movement of this jaw might be described as swinging forward as if first hinged from the top and then as if hinged from the bottom, but al-

Between the zinc and the die is placed a sufficient number of steel plates to reduce the opening at the bottom of the crushing chamber to the desired size.

As will be noticed from the engraving, the wearing surfaces on the pitman and die toggle are provided with steel bushings which can be renewed easily when worn out. The manner of fastening the reversible dies is such that either can be taken out without disturbing the other. The lower ends of the dies will wear out first, but before being worn smooth should be reversed. The nuts on the principal bearings are provided with a locking device, which prevents them from coming loose. The spout conveying the product away from the crushing chamber is of heavy sheet steel and of such size and shape that no material is wasted. The various sizes of these crushers are built on the interchangeable plan.

The Girard Iron Company, operating Mattie Furnace, at Girard, Ohio, will soon manufacture their own coke. W. H. Warner of Cleveland, Henry B. Shields of Girard, have secured an option on 110 acres of coal and 162 acres of surface near Smock, Pa., the price paid being \$60,000. The purchasers are the principal stockholders in the Colonial Coke Company, being the name under which the new coal tract is to be developed. The contract has already been let for the construction of 50 bee hive ovens, work on which is now being prosecuted.

Inspection Records of the American Tool Works Company.

A very complete system is in use at the works of the American Tool Works Company, Cincinnati, for keeping track of every machine passing through the establish-

1-16x8 Standard Lathe
Comp. Post
#2069
Ship to _____
Date Received _____
Date of Delivery _____

Fig. 1.—First Record.

The AMERICAN TOOL WORKS CO., Cincinnati, U. S. A.

Inspection Record of Lathes.

Size 16 Inch Swing 8 Foot Bed. Serial No. _____
Style Compound Rest. _____
Erected under _____ Foreman. _____
Aligned by _____
Inspected _____ By _____
Packed _____ By _____
Shipped to _____
Date _____ Order No. 2069

ALL TESTS MADE IN THOUSANDTHS.

Head Spindle with Shear Points	TOP	Up <u>1/4</u>	Down	SIDE	To Rear <u>1/2</u>	To Front
	Straight			Straight		
Tailstock Spindle with Shear Points	TOP	Up	Down <u>1</u>	SIDE	To Rear <u>1/2</u>	To Front
	Straight			Straight		
Tail stock Spindle with Head Spindle	TOP	Up	Down <u>2</u>	SIDE	To Rear	To Front <u>1/2</u>
	Straight			Straight		
Spindle with Cross Slide	Loose Front _____ Loose Back _____ Straight <u>Yes</u>					
Taper Attachment with Shear	Parallel <u>to Taper</u>					
Bore in 6 inches	Large in Front <u>1/2</u> Large in Back _____ Straight _____					
Bore in 10 inches	Large in Front _____ Large in Back _____ Straight _____					
Bore in Spindle Runs	Out. In. Inches. True <u>Yes</u>					
Bush in Spindle Runs	Out. In. Inches. True <u>Yes</u>					
Chuck	Diam. <u>15</u> Jaws <u>4</u> Style <u>Compound</u> Make <u>Miller</u> Fitted <u>Yes</u> Runs <u>True</u>					
Back Gear Run	<u>Good</u>					
Remarks	Inspected by _____ Inspector for _____ Inspection Approved and Machine Accepted. _____ By _____ For _____					

Fig. 2.—Lathe Record.

INSPECTION RECORDS OF THE AMERICAN TOOL WORKS COMPANY.

ment. The method embraces both old and new work and is complete in every detail. Further than this, the records themselves, by means of card indexes, are easily available at any time, so that the inspection record of any machine can be quickly obtained if required. We herewith reproduce several of the cards.

The first record concerning the lathe is shown in Fig.

1. It merely bears the name and the number of the machine, shipping direction and dates of receiving and delivering. Fig. 2 shows a complete record of a 16 inch by 8 foot lathe. This provides space for the name of the foreman under whom it was erected, the name of the mechanic who aligned it, the name of the inspector, the packer, the date of shipment, and to whom shipped. Following this is a record of all of the tests made of the lathe, these dimensions all being in thousandths of an inch. These, of course, give the variations from absolute accuracy of the parts mentioned.

Fig. 3 is what might be termed a check for shipping. It contains all of the parts of a style "A" friction countershaft for a 16 x 8 standard lathe. These parts are assembled, packed for shipping, and signed by the one making the examination.

The fourth card is an inspection record of a No. 6 screw machine, and contains all of the tests made of all of the parts. While all of these cards are extremely simple, they provide records of the greatest value in case any fault is found with the machine after delivery. They show exactly what the variations were after the machine had been erected at the works of the builders. Subsequent statements disagreeing with these can seldom be substantiated.

The Development of Russian Industries.

The Russian Ministry of Finance has published recently a comprehensive report showing the increase in Russian manufactured products for the year ending December, 1897. According to this report it appears that 80 per cent. of all manufactured products come under four heads—viz., textile industries, articles of food, mining and metals. The other branches of industry are but poorly developed. During 1897 the textile industry was carried on in 4449 mills, which employed 642,520 hands, and turned out goods to the value of 946,296,000 roubles.

STYLE "A" FRICTION COUNTERSHAFT.

FOR 16x8 Standard Lathe

CONSTRUCTION No. _____
INSPECTED _____ 18 _____
INSPECTED BY _____
CHECKED BY _____
PACKED BY _____
SHIPPED TO _____
DATE _____

✓ 10. Inch drop hangers and boxes.	No. 1
✓ 1 Shaft, <u>1 1/2</u> Dia.	No. 2
✓ 1 Step cone pulley.	No. 3
✓ 2 Friction pulleys, <u>1 1/2</u> inch diameter, <u>1 1/2</u> inch face.	No. 4
✓ 2 Friction casings and 2 screws.	No. 5
✓ 2 Friction band stubs and 4 screws.	No. 6
✓ 2 Friction bands.	No. 7
✓ 2 Adjustable shoes.	No. 8
✓ 2 Adjustable levers, 3 screws and 1 nut.	No. 9
✓ 2 Oil dishes.	No. 10
✓ 1 Sliding wedge.	No. 11
✓ 1 Shipper dog and 2 screws.	No. 12
✓ 1 Hook.	No. 13
✓ 2 Clutch wedges, 2 screws, and 2 springs and triggers.	No. 14
✓ 1 Collar and 1 set screw.	No. 15
✓ 1 Loop.	No. 16
✓ 1 Fork and 1 set screw.	No. 17
✓ 2 Oil bushes, 2 screws and 2 oilers.	No. 18
✓ 1 Shipper rod.	No. 19

2 1/2 inches REMARKS:

The above parts of Friction Countershaft have been securely packed and shipped with the above machine. Please check up the same carefully according to this list. Should any of the parts be found missing, fill out the following blank and return to this office at once, as no claims will be recognized unless made within 10 days from receipt of machine, and must be accompanied by this list.

THE AMERICAN TOOL WORKS CO.

On examination, we find the following parts missing:

SIGNED _____

Fig. 3.—Countershaft Record.

The great increase in this industry is well shown by a comparison with the figures for the year 1887, when the mills numbered 2847; the workpeople were 339,178 in number, and the value of goods produced was 463,044,000 roubles. In regard to articles of food the increase in these ten years were as follows: Producing centers rose from 14,508 to 16,512; the value of the products rose from

375,286,000 to 648,116,000 roubles; and the number of workers engaged from 205,223 to 255,357. In the iron and steel industries the works increased in the same period from 1377 to 2412; the output from 112,618,000 to 310,626,000 roubles; and the workmen from 103,300 to 214,311. In 1887 there were 2656 mines and mining works, and in 1897 they had increased to 3412; the output rose from 156,012,000 roubles in 1887 to 393,749,000 roubles in 1897, and in the same period the number of workmen employed had risen from 390,915 to 544,333.

showing the scanty attention bestowed on husbandry by the Russian Government, that the preparation of animal products rose at the rate of only 4 per cent., and the production of articles of food at but 1.7 per cent. Russia is slow to grasp the fearful lessons of the recent famine years.

Laboratory Notes.*

BY J. M. CAMP, DUQUESNE, PA.

If apologies are required for the following notes mine lie in the fact that they are detailed descriptions of some methods of analyses, partly new, that have stood the test of time and practical operations. They include a method for determining phosphorus in coke and coals, the determination of phosphorus in ores, pig iron and steel containing arsenic, and the determination of alumina as phosphate in ores and blast furnace cinder.

Phosphorus in Coke and Coal.

One of the requirements of the laboratory over which the writer has charge is the determination of the ash, sulphur and phosphorus each day in an average sample of coke from all furnaces of the previous day's consumption. The fusion of the ash, consisting as it does of about 50 per cent. silica, 30 per cent. alumina, and containing 10 per cent. sesquioxide of iron, with other bases, and its final evaporation to dryness to separate silica, is at best a tedious process which cannot be safely hastened, with the result that the time of the analysis is unduly prolonged, consequently the following scheme was evolved, yielding excellent results in the minimum of time:

The sample of coke, partly dried and ground to pass through a 40 mesh sieve, is delivered to the laboratory by the sampler on the afternoon of the day on which it is taken. This is dried at 100 degrees C. for one hour and when cool 5 grams are weighed off into a 1 1/4-inch porcelain crucible. This is left in the muffle furnace over night, and in the morning the lump of ash and any particles adhering to the crucible are transferred to a 30 c. cm. platinum crucible, mounted on a platinum tripod. About 5 c. cm. of dilute hydrochloric acid are now added, 1 acid to 2 of water, and about 10 c. cm. of hydrofluoric acid, and the crucible and tripod are placed directly on the top of the chimney of an Argand burner, and the flame so regulated that the solution will not boil. In from 20 to 30 minutes the solution is to dryness, and dried to drive off the last traces of hydrofluoric acid, but not baked, as this would render some of the bases insoluble in the dilute acid to be subsequently used. When cool about 15 c. cm. of the same dilute hydrochloric acid are added and the crucible warmed until all is in solution. The contents of the crucible are now transferred to a 12 cm. evaporating dish, and 5 c. cm. of strong nitric acid added. The bulk of the solution, now aggregating about 75 c. cm., and the solution boiled for one or two minutes, it is now filtered to remove any possible traces of silica or unconsumed carbon into a 16-ounce flask. The treatment now is the same as that previously described before this society (Foot note, vol. XI., p. 251)—viz., the addition of 25 c. cm. of strong ammonia, and then strong nitric acid until the precipitated iron and alumina are just dissolved, and 5 c. cm. in excess, making a total of about 25 c. cm. strong nitric acid. The solution is brought to 85 degrees C. and 75 c. cm. molybdate solution blown in by aid of a pipette. The solution is kept agitated for about five minutes, and it is then filtered through a weighed filter paper that has been dried at 115 to 180 degrees C., and weighed between watch glasses. The precipitate is washed with a 2 per cent. solution of strong nitric acid, dried at one hour at above temperature and weighed between watch glasses, and 1.63 per cent. of weight is taken for phosphorus. In the case of coals the treatment is exactly similar, excepting that the coal is usually coked in a large platinum crucible, and then, to save the platinum crucible from the protracted heating, the coke is transferred to the porcelain crucible for complete combustion, preferably over night.

The Determination of Phosphorus in Ores, Pig Iron and Steel Containing Arsenic.

The exact determination of phosphorus in an ore, particularly a manganese ore, coming as they do from all quarters of the globe, a pig iron or steel containing arsenic, although not an every day occurrence, still a method is very desirable wherein at some stage of the analysis the arsenic can be eliminated without a marked change in the essential details of the regular phosphorus determinations, and without prolonging the time of the analysis beyond that of the regular routine work. Numerous experiments have been made by the writer along these lines, mainly in the attempt to reduce the concentrated ferric chloride solution to the ferrous state,

* Read before the Chemical Section of the Engineers' Society of Western Pennsylvania.

The AMERICAN TOOL WORKS CO., Cincinnati, U. S. A.

Inspection Record of Screw Machines.

Size #6 Head 5.4.05 Serial No. _____
Built by _____
Inspected _____ By _____
Packed _____ By _____
Shipped to _____ Order No. _____
Date _____

ALL TESTS MADE IN THOUSANDTHS.

	TOP	SIDE
Near Spindle with Bed Points	Up Down Straight	To Front To Rear Straight
Turret Slide with Bed Points	Up Down Straight	To Front To Rear Straight
Holes in Turret with Head Spindle Point	Up 2 Down Up 1/2 Down Up 1/4 Down Up 1/8 Down Up 1/16 Down	To Front To Front To Front To Front To Front
Spindle with Rest	Loose Front Cut off	Loose Back Forming
Style of Rest	Above Front Below Central	Above Rear Below Central
Capacity through Tube	2 3/16	
Size of Collets furnished	2 1/8	Style Crank out
Collets Run	Out in 16 inches	True
Size of Turret Holes	1 3/4 Diam.	3 Deep
Length of Travel of Turret Slide	11	Inches
Condition of Turret Mechanism	Good	
Length, Stock can be Fed at one Operation of Lever	3 1/4 Inches	Length of Spindle 45 1/2 in
Condition of Pump and Connections	Good	
Style of Pump	Recirc	
Equipped with Wire Feed	Yes	
Equipped with Power Feed	Yes	
Fit of Oil Fenders	Good	
Fit of Gear Covers	Good	
Covers Furnished for	Three Chuck & Power Feed	
Spanner Wrenches for	Three Chuck & Adjusting Nut	
Size of Open End Wrenches	Four Pat & 1/2 Square	

Special Tools and Appliances.

Remarks _____
Inspected by _____
Inspector for _____
Inspection Approved and Machine Accepted. _____
By _____
For _____

Form 55-12-14-10-500.

Fig. 4.—Screw Machine Record.

INSPECTION RECORDS OF THE AMERICAN TOOL WORKS COMPANY.

The development of single branches of industry during the decade in question is shown clearly in the report by means of average tables of percentage. Thus the productions of the mining industry increased at the yearly rate of 11.2 per cent. In comparison with their sum total; the chemical industry, at the rate of 10.7 per cent.; the timber trade, at 9.3 per cent.; iron and steel, at the rate of 8.4 per cent.; ceramics, at 8 per cent.; and textiles, at 7.8 per cent.; and paper shows the lowest rate, being only 3.2 per cent. It may be remarked, in conclusion, as

and then volatilizing the reduced arsenic, but without marked success, until, acting on the suggestion contained in a paper by E. D. Campbell (Foot note Journal Analytical Chemistry, Vol. VII), descriptive of some experiments made by his students using oxalic acid as the reducing agent, and with the meager details there given, the following scheme was tried, yielding excellent results up to 1 per cent. arsenic. The method for ores only will be given. Its application to pig iron or steel will be readily seen:

Five grams of the ground and dried sample are weighed off into a 12 cm. porcelain dish with watch glass cover and 50 c. cm. of strong hydrochloric acid added, and the solution boiled gently for about 30 minutes. It is now diluted with sufficient cold water to prevent cutting the filter paper, and filtered into another dish of the same size. This solution will contain all the arsenic in the ore not volatilized, and is placed on the steam bath to go to dryness over night. The residue is burned and fused with the mixed carbonates and the fusion allowed to harden around a platinum rod. The crucible is now warmed and the greater bulk of the fusion removed on the platinum rod. This, while still hot, is placed in the dish with cover, in which the ore was originally dissolved, and containing 10 or 15 c. cm. of water. Dilute hydrochloric acid is added to the crucible and warmed, and this process is repeated until all signs of the fusion are removed, and added to the dish containing the fusion. All excess of strong hydrochloric acid is now added to dissolve any of the remaining fusion, and this dish is placed with the other on the sand bath. In the morning, to the dish containing the dried mass from the original filtrate, 2 grams of pure oxalic acid are added and 50 c. cm. of strong hydrochloric acid, and the solution, with watch glass cover, evaporated to dryness by hard boiling, but not baked. When cool add 30 c. cm. strong hydrochloric acid and evaporate to first appearance of insoluble ferric chloride. Remove from the light and add 10 c. cm. strong nitric acid when the violent action has ceased. Warm until all is in solution, dilute with cold water and filter into a 16 ounce flask, using 2 per cent. nitric acid for washing. In the meantime, to the dish containing the fusion dilute hydrochloric acid is added just sufficient to moisten, and enough hot water to dissolve the chlorides. This is warmed until all is in solution but the separated silica and filtered into the same flask with the original filtrate. The phosphorus is now precipitated as above described for phosphorus in coke.

The Determination of Alumina as Phosphate in Ores and Blast Furnace Cinders.

Among some of the advantages of precipitating and weighing alumina as phosphate over the hydrate precipitation are in ores, where with the latter method the iron and alumina are weighed together, the iron being finally determined by solution of the precipitate and titration, or preferably titration in another portion of the same sample. All the errors of the entire manipulation are thrown onto the alumina, the lesser dog, while in the phosphate precipitation the alumina is determined in a separate portion, and is responsible only for its own manipulative errors. In blast furnace cinders, to determine the alumina, the laboratory's daily task, the determination of the iron is entirely obviated, most furnace managers being content to receive the silica and alumina in each day's cinders, counting the balance as bases, with a full analysis at regular stated intervals. The iron not being an essential component of the cinder, its determination in a cinder of a normal working furnace, where it is little more than a trace, is useless, while with an abnormal working furnace, where it may be high, the manager has something else on hand to worry him of much more importance. The filtration and washing of the phosphate precipitate are also much faster than the hydrate precipitate. This statement applies particularly to cinders, where the large amount of alumina apparently coagulates the separated sulphur and the precipitate settles rapidly, leaving the supernatant liquid practically clear and readily decanted. In ores where there is much less alumina, more free sulphur is in suspension, with a partial clogging of the filter, but not aggravating. One disadvantage of the phosphate method is that there is no end point to the washing of the precipitates, it being slightly soluble in the wash water, and after the tenth washing shows a fairly uniform volume of phosphomolybdate precipitates in equal volume of the successive filtrates up to the twentieth washing, on testing with molybdate solution. The addition of acetic acid and ammonium acetate to the wash water gave a slightly greater weight on a slag of known composition, but still showed the phosphate in the filtrates up to the twentieth washing. It is important that the precipitate be washed thoroughly; otherwise the platinum ware, if used, will suffer.

The method as used on ore and cinders will be given, and is as follows: To the cold hydrochloric acid filtrate, diluted to about 400 c. cm., from the silica of 1 gram of

ore or cinder, in a No. 5 beaker, add 80 c. cm. of a 10 per cent. solution of ammonium phosphate and then ammonia until faint permanent precipitate is formed. 15 c. cm. of strong hydrochloric acid is now added, and for ores, on account of the greater bulk of iron present, 50 c. cm., and for cinders 30 c. cm. of a 20 per cent. solution of sodium hyposulphite. The beaker is now placed over the light and heated just to boiling. Now in the same graduate measure off 8 c. cm. of strong acetic acid and 15 c. cm. of a 20 per cent. solution of ammonium acetate, and add to the boiling solution and boil ten minutes. If the latter is added before the solution is boiling or near the boiling point the precipitate will be flocculent and difficult to filter. Remove beaker from the light and allow precipitate to subside. Decant clear solution and wash precipitate onto the filter, and then wash ten times with hot water. Transfer precipitate to platinum crucible without lid and place in front part of the muffle. When papers are charred transfer to hottest part of muffle till burned. Cool and weigh. 41.85 per cent. of weight is alumina.

The Crowe Mechanical Stoker.

A new style of mechanical stoker that has novel features is being installed in the first of the American Steamship Company's 500 foot vessels, now being completed at Cleveland. Four of these ships are under construction under charge of A. B. Wolvin of Duluth, and are to be in the ore trade for the American Steel & Wire Company. They are the largest ships by some 20 feet length and 2 feet depth that have yet been built for the trade of the great lakes, and they are being fitted with the latest appliances for economical running and stability.

The fireroom equipment of these ships will consist of Babcock & Wilcox water tube boilers furnishing steam at 250 pounds pressure to quadruple expansion engines of great power. Furnaces are to be of the new style Crowe automatic stoker, invented by Chief Engineer Crowe of the Daisy Milling Company, Duluth, Minn., and built by the Northwestern Supply Company of Duluth. Two double sets of these furnaces will be put in each of the four ships. Mr. Wolvin a year ago put into the steamship "Pennsylvania," which he was then building, a stoker that was quite fully described in *The Iron Age* at the time. The principle of automatic stoking was so satisfactory that contracts have been made with the Northwestern Supply Company for the equipment of these four ships, after long examination of a machine in use at the mill of the Daisy Company and after exhaustive tests of evaporation and fuel consumption. The furnaces to go into these ships are to be arranged for forced draft and they are the first in the great lakes to make use of this adjunct. The difficulty of maintaining the high pressure required when running with the wind has been such that it is believed the use of forced draft will be a distinct advantage.

These furnaces are so arranged that the grates steadily and constantly move from the front of the furnace toward the rear at such speed as may be desired, the rate being governed absolutely by the operator. The grates are connected at each side of the furnace to endless chains that pass around sprocket wheels at both ends of the furnace, and these wheels move as impelled by a small independent engine. As the grate bars reach the rear end of the furnace and drop down to move to the front again all ashes fall off and are removed, and as the bars come to the front and move up for the feed of coal they present a clean surface. It has been found possible to burn a class of waste fuel that is very hard to consume in other furnaces, and the consumption of fuel is strong and constant. Owing to the steady feed and the construction of the fire brick arch the furnaces are practically smokeless, and the combustion is quite perfect.

One of these furnaces has been applied to an electric light works at Duluth, another is being installed at the Adams mine of the Lake Superior Consolidated Iron Mines, the six ships of the Pittsburgh Steamship Company (Carnegie) are being arranged so that they may be fitted later, and the Northern Steamship Company figure on adopting them for their two fine passenger ships, "Northwest" and "Northland."

The Sessions Foundry Company, Bristol, Conn., have secured a renewal with the city of Boston of their contract for supplying with iron Castings the water and sewer departments of that city.

A new law has been passed in Brazil, to go into effect on July 1 next, prohibiting the importation of goods manufactured abroad, bearing labels wholly or partly in Portuguese.

Two of the four Black Plate mills of the plant recently leased by N. & G. Taylor Company, at Cumberland, Md., were started last week, employing 60 men.

The Iron Age

New York, Thursday, March 1, 1900.

DAVID WILLIAMS COMPANY,	- - - - -	PUBLISHERS.
CHARLES KIRCHHOFF,	- - - - -	EDITOR.
GEO. W. COPE,	- - - - -	ASSOCIATE EDITOR, CHICAGO.
RICHARD R. WILLIAMS,	- - - - -	HARDWARE EDITOR.
JOHN S. KING,	- - - - -	BUSINESS MANAGER.

American vs. British Workmen.

An "occasional correspondent" of the *Engineer*, who has "on more than one occasion acted as commissioner" for that paper in the United States, attempts to explain the differences between American and British workmen, and gives his reasons for the varying conditions. The fiercer energy of the American workman and his ability to do more in a certain time are attributed to the climate, food and social surroundings. The dry atmosphere, as compared with that of England, is more invigorating, the result being that a man is stimulated to greater activity, both mentally and physically. There "is more electricity in the air." This would seem to be borne out by the fact that the average foreign mechanic works with more vim in this country than he did at home. The converse of this is also true; the American mechanic transplanted to Europe promptly loses a portion of his energy and becomes like his neighbors. How much of this is to be attributed to the climate and how much to environment and the silent influence of those around him cannot be estimated.

Meat three times a day supplies the fuel, while the "climate causes a desire for it so underdone" as to repel the newly arrived Britisher. This, says the writer in question, serves the purpose for a time, but in middle life the workman becomes nervous and dyspeptic, and is compelled to make way for others who are entering the road he has just traversed. Since the apprenticeship system is not viewed with much favor, the writer thinks that the necessary replenishing of the ranks must be from the Old World in the shape of ready made, full grown workmen. The writer further states that the finest examples of artisans in American shops are those who learned their trade in Europe. It would be interesting to know just where the commissioner was acting when he found this lump of information. The vast majority of foreigners in this country are employed at manual labor, which requires a trained back and not a trained head. The skilled mechanic in every large industry is the born and bred American.

The workman is ambitious. There is no place, political or social, to which he and his children may not aspire. Non-productive society is a growing element here, but it has not attained the importance and influence which it has so long held abroad. Here the man works and is not ashamed to let the fact be known. The man and his employer are equal, and the writer justly observes that "the absence of such class distinction does leave a clearer field for the very best of the working classes. Whatever may be the drawbacks of a republic, and of the almost entire absence of veneration or respect for tradition which prevails in America, a certain feeling of self respect is engendered by social equality, which is wanting among the artisan class here, and this self respect stimulates ambition and is so far for the good of the community."

We cannot agree with the statement that the use of automatic tools, while they may be for the good of mankind and the profit of the manufacturer, "tend to abolish the race of skilled artisans and to concentrate the

mechanical engineering skill of a country into the hands of a limited class of designers." This conclusion is far too sweeping. The man who works at one machine all his days becomes an automaton. But the man who labors in a shop filled with different tools of the highest grade is taking the best kind of a course in engineering. The man dull enough to become an automaton and a part of the machine he operates would never have amounted to anything anyhow. He found his level when that machine found him and he never thought of looking higher. The majority of American mechanics selected the trade because of a liking or aptitude for it. They are interested in learning all they can of it, because they take to it naturally and because they know that increased knowledge brings advancement.

"An engine fitter, machinist or pattern maker in Philadelphia must have his lavatory, his locker and towel." He has them because the American manufacturer has found out that it pays for him to provide every convenience for his men. He knows that the man who is cleanly in his habits will do more and better work than the man who is slovenly and loves filth. Further, he has ascertained that he can train his men to be neat. Some think the use of soap and water so essential (solely from the financial or money making aspect) that the closing whistle sounds five to ten minutes before the hour in order that the men may use the facilities furnished during the time of the employer.

Charcoal Pig Iron Regaining Favor.

The revival in the demand for Lake Superior charcoal pig iron and the good prices now ruling are not merely accompaniments of the general prosperity. They are not due alone to the fact that the supply of coke pig iron was barely equal to the demand for the greater part of last year and that anything in the form of pig iron was eagerly taken by hungry consumers. The better trade in charcoal iron is also due to the gradual return of many malleable casting manufacturers to the use by preference of that class of material. When all prices were extremely low, and makers of malleable castings professed to be thoroughly satisfied with results obtained from the use of coke iron, the future of the charcoal iron producer looked most unpromising. Unless a charcoal furnace could turn out its product at a cost close to that of coke iron, it appeared to be doomed to idleness and decay. As few of them were able to endure such a strain, it seemed at one time as though the fingers of one hand would be more than enough to count the number of furnaces sure to continue in the business of making Lake Superior charcoal iron. But quite a transformation has occurred of late in this branch of trade. Old furnaces that had long been regarded as abandoned are again in blast and others are being prepared for operation as rapidly as possible. The coming year promises to see a very substantial increase in the output, and from present indications it will be needed. For some time the supply of coke iron for malleable purposes has been short because of the demand for Bessemer pig from the steel works, and the malleable foundries would have been obliged to turn to the charcoal furnaces for at least part of their supply. But as favorable or unfavorable forces develop in couples, if not in greater number, so it happens that just at this time a distinct tendency is seen among the malleable concerns to prefer charcoal to coke iron. This has proved to be especially the case with makers of small malleable castings, yet even those who turn out drawn bars and other large sized malleables have, in certain instances, manifested the same disposition, using at least half charcoal and half coke as a

mixture, giving more satisfactory results than all coke, as used up to a short time since. The great growth in the production of malleable castings offers the producers of charcoal pig iron an increasingly attractive field.

The Greatest Producer of Coal.

It is not so many years since that the world, incredulous at first, realized that the United States had stepped to the first position as a producer of pig iron and steel, which we now occupy unchallenged. There are indications that we shall enter the new century with the record of being the largest coal mining country in the world, with all which that implies as the ranking industrial nation.

How rapid our progress has been and how close we came even in 1898 to attaining the position of the first is shown in the following table, which gives the official statistics collected by E. W. Parker of the United States Geological Survey:

The Coal Production of the United States and Great Britain.

Year.	United States. Gross tons.	Great Britain. Gross tons.
1870.....	82,863,000	110,431,192
1875.....	46,686,000	133,306,485
1880.....	63,822,830	146,969,409
1885.....	99,069,216	159,351,418
1890.....	140,866,931	181,614,288
1895.....	172,426,366	189,661,362
1896.....	171,416,390	186,361,260
1897.....	178,769,344	202,129,931
1898.....	196,405,953	202,054,516

It will be observed that 30 years ago Great Britain produced more than three times the amount of coal that we did. In 1883 we first crossed the 100,000,000 mark, when England had come up to 163,000,000. In 1898 only about 5,500,000 tons separated the two countries.

While the official statistics for 1899 have not yet come to hand there is not the shadow of a doubt that our output overtopped theirs. During the coming decade there may be isolated instances when during dull times we may fall back, but it is quite sure, considering the rate of progress, that we shall steadily draw away from our insular rivals.

CORRESPONDENCE.

A Reply from Schuchardt & Schuette.

To the Editor: From the letter of the Newark Machine Tool Works in your last week's journal we see that they are apparently not satisfied with our statement that we have had nothing whatever to do with the alleged sales of other makes of machines like those made by them, which their foreign agent had reported to them. We flatter ourselves that the reputation of our firm is such that nobody has occasion to doubt our word, and to go further than this and repeat that the whole matter is not only incorrect from beginning to end, but a pure invention, we see no occasion. The suggestion of the Newark Machine Tool Works to clear the affair up to their satisfaction we must decline, as we are of opinion that it is for the accuser to prove the accused's guilt, not vice versa.

For SCHUCHARDT & SCHUETTE.

MAX DAUNERT, manager New York office.

NEW YORK, February 26, 1900.

J. Bartlett, under the style of the Bartlett Iron & Steel Company, will embark in the wholesale trade at Joplin, Mo., and has under construction a three-story brick warehouse on the 'Frisko tracks, 50 x 120 feet in size, and proposes to carry a line of goods adapted to the zinc miners' and manufacturers' trades, such as bars, sheets, plates, pipes and tubes, structural shapes and heavy hardware.

In referring to the equipment of the Youngstown rail mill in a recent issue of *The Iron Age*, the impression was created that the drilling machines were built by the Hilles & Jones Company of Wilmington, Del. As a matter of fact, the Hilles & Jones Company built the ten rail straightening presses installed at the plant.

The Cuban Steel Ore Company have placed an order with the Baldwin Locomotive Works of Philadelphia for two six-wheel engines, weighing 110,000 pounds each.

The Report of the Industrial Commission.

WASHINGTON, D. C., February 27, 1900.—The Federal Industrial Commission is about to transmit to Congress the testimony taken concerning the great industrial combinations commonly known as trusts, which has been gathered during a series of hearings extending over the past year. The determination of the Commission with regard to the transmission of any recommendations looking to legislation, either Federal or State, has been modified so many times within the past ten days that no one conversant with the situation will be surprised to learn that the Commission has prepared a brief report to accompany the testimony, which outlines somewhat vaguely a policy of publicity, which, it is suggested, may prove of benefit to the investing public, without endangering business prosperity. These suggestions have heretofore been partially outlined in these dispatches and embrace only minor features of the original report, which was drafted several months ago and which the Commission found itself unable to adopt even by a majority vote. The recommendations made in the brief report which has now been agreed to are of so mild and inoffensive a character that, of the 18 members of the Commission, all who are now accessible have appended to it their signatures, though in some cases with slight reservations as to the suggestions affecting freight classification by the Interstate Commerce Commission.

In its report the Commission states that industrial combinations have become fixtures in our commercial life, possessing good features which should be preserved and a power for evil which should be destroyed. As to the regulation of these great combinations two classes of remedies are proposed, one to be applied by the States and the other by the Federal Congress. To prevent the organizers of corporations from misleading the public the Commission recommends that the promoters be required to furnish full details regarding the organization, the property for which securities are to be issued, amount and kind of same, and all other material information necessary for a safe and intelligent investment; that prospectuses soliciting subscriptions which fail to state the full details regarding the proposed organization or which make false statements shall be deemed fraudulent; and that certificates of incorporation shall state the nature of the business to be carried on, the powers granted to directors, &c., and all limitations upon the officers of the companies or upon the stockholders.

The Commission also recommends that directors or trustees of corporations be required to furnish at suitable intervals reports showing in reasonable detail the financial condition of the corporation; to grant free access to stockholders to records of directors' meetings; to provide lists of stockholders, with their addresses and the amount of their holdings; and generally to adopt methods to enable stockholders to prevent the misuse of their property by directors or others.

Competition in industries in which excessive profits are made is to be invited by requiring the larger corporations to publish annually a properly audited report showing the business in detail.

Closely connected with these recommendations are other suggestions designed as a basis for Congressional legislation to prevent corporations obtaining advantages over each other by securing discriminations in freight rates over transportation lines. Congress is urged to expand the powers of the Interstate Commerce Commission so as to grant authority not only to prescribe the methods of keeping accounts of the railroads, but also to prescribe classifications of freight articles and to provide regulations for freight transportation. It is further suggested that the Commissioners have power to fix the date on which decisions of the Commission shall become operative and shall remain in force until reversed by the courts. Finally, it is proposed that penalties for violations of the Interstate Commerce law shall be fines against the railroad corporation, rather than the imprisonment of its officials.

With the exception of the proposition made by the Commission with regard to the expansion of the powers of the Interstate Commerce Commission, all the suggestions as to legislation relate to matters within the exclusive control of the States. In this connection the best legal authorities here criticize the report on the ground that nearly all the States now have laws covering the Commission's suggestions, and that where no statutes are in existence the offenses referred to are well within the scope of the common law. The statutes of New Jersey, where the leading industrial combinations are incorporated, taken in connection with the common law, provide adequate remedies, it is claimed, for all frauds such as are contemplated by the Commission's report.

Concerning the recommendations for the enlargement

of the powers of the Interstate Commerce Commission, it is the opinion of the best lawyers here that the suggestions come within the authority of Congress derived from its general power to regulate interstate commerce. The wisdom of the suggestions, however, is not so generally conceded. The proposition that the Commission prescribe bookkeeping methods and freight classifications for the railroads is regarded as of very doubtful expediency, while the suggestion that violations of the Interstate Commerce act should be punished by fines levied against the carrier rather than imprisonment of officials is looked upon as likely to please rather than embarrass the railroads which might be disposed to offend. All radical legislation against corporations in recent years has aimed at fixing personal responsibility upon officials, coupled with penalties of fine and imprisonment, and it is pointed out that if the laws shall require only the levying of fines upon the corporations it will be a mere matter of arithmetical calculation in many cases to determine whether certain things shall be done which may render the carrier liable to prosecution.

Within the past week the Democratic minority in the House has developed definitely its anti-trust programme, to be followed unless the Committee on the Judiciary reports on some of the measures now pending before it. Representative Richardson, the leader of the minority, has presented almost daily a joint resolution directed against one of the great industrial corporations, placing their products under the control of the Interstate Commerce Commission, and prescribing their interstate shipment until the Commission is satisfied that they have not yielded a profit to the manufacturers of more than 4 per cent. Among the corporations thus attacked have been the American Sugar Refining Company, the American Steel & Wire Company, the American Tin Plate Company, the International Silver Company, &c. The text of the resolution referring to the American Steel & Wire Company is as follows:

"Joint resolution prohibiting the transportation of barbed wire, fence wire, wire nails and other products of the American Steel & Wire Company from one State to another.

"Whereas, the prices of barbed fence wire, wire nails and kindred articles in the wire line, the products of the American Steel & Wire Company and other manufacturers of similar products, have recently been advanced, manufacturers in each instance having agreed upon the same price, which is *prima facie* evidence that trusts or combinations exist for the purpose of destroying competition in order that enormous profits may be realized. Therefore be it

"Resolved by the Senate and the House of Representatives of the United States of America in Congress assembled, That barbed fence wire, wire nails and kindred articles in the wire line, products manufactured by the American Steel & Wire Company and other manufacturers of similar products, shall, after six months from the passage of this resolution, be prohibited by the Interstate Commerce Commission from being transported in any manner whatever from one State to another until the said Commission are satisfied that barbed wire, wire nails and other products of said manufacturers offered for interstate transportation have not yielded a profit to the manufacturers thereof of more than 4 per cent. in excess of the cost of the same, which shall be ascertained in such manner as the said Commission, in its discretion, may determine."

Mr. Richardson claims to find his authority for the proposed action in the decision of the United States Supreme Court in the cases of the Addyston Pipe & Steel Company and the E. C. Knight Company.

"I believe," said he to the correspondent of *The Iron Age*, "that the Interstate Commerce Commission under these decisions has the power to refuse interstate transportation to all articles which earn enormous profits through the control of monopolies until the profits on such goods have been brought within fair and reasonable limits."

W. L. C.

Information Wanted.—Who produces machinery for making fish oil and preparing the fish scrap for fertilizer?

A correspondent in Japan desires to have catalogues and estimate delivered at Yokohama for one complete set of horseshoe machinery, to have a capacity of 6000 per day, with the cost of engine and boiler necessary to drive the same.

Jones & Laughlins, Limited, of Pittsburgh, are installing in their American Iron & Steel Works about 10,000 horse-power boilers to augment their steam plant. This concern have recently started a new bar mill that they have been remodeling for some time, but it is not one of the new continuous bar mills which have been under erection for some months. These two mills are rapidly approaching completion, and will be ready for operation before a great while.

The Frick Coke Suit.

There was filed in the Court of Common Pleas No. 2 of Allegheny County, Pa., the suit of certain stockholders in the H. C. Frick Coke Company against the H. C. Frick Coke Company, as a corporation, the Board of Directors of the Coke Company and the Carnegie Steel Company, Limited. The plaintiffs are John Walker, personally and as guardian of Andrew Carnegie Wilson, S. L. Schoonmaker and John Pontefract, the holding of these being respectively 4096, 113, 556 and 556 shares out of the 200,000 shares of \$50 each. The bill recites the following:

The defendants, the Carnegie Steel Company, Limited, pretend to be a limited partnership organized in the year 1892 under the act of the General Assembly, approved June 2, 1874, entitled "An act authorizing the formation of partnership associations in which the capital subscribed shall alone be responsible for the debts of the association except under certain circumstances." They are engaged very extensively in the manufacture of pig iron and various forms of steel, requiring for such purposes very large quantities of coke, such as is manufactured by the said H. C. Frick Coke Company, to wit, about 2,500,000 tons annually.

The Carnegie Steel Company, Limited, are and for a long time prior to the happening of the grievances herein complained of were the holders and owners of 59,104 shares of the capital stock of the H. C. Frick Coke Company, and Andrew Carnegie is the holder of 51,213 shares of the capital stock of the company. The holders of the partnership association, together with the holdings of Andrew Carnegie, constituted more than a majority of the capital stock of said Coke Company, and so enabled the Carnegie Steel Company, Limited, and Carnegie, by virtue of their control, as majority owners of the Coke Company, to elect their nominees as directors of the Coke Company and dominate and control their action.

Some time in the year 1899 the Steel Company and Carnegie set up the pretense that the Coke Company had contracted to sell to them coke at \$1.35 per ton, and, after this came to the knowledge of the president of the Coke Company, he submitted it for the consideration of the Board of Directors at their meeting October 25, 1899, and thereupon said board passed a resolution instructing its president as follows:

"Resolved, That the president be authorized and instructed to notify the Carnegie Steel Company, Limited, that the existence of any contract is denied, and that no claim to settle in accordance with the terms of the alleged contract for past, present or future deliveries of coke to the said Carnegie Steel Company, Limited, will be recognized or entertained by this company."

Notice was immediately given to the Steel Company and Carnegie in accordance with the resolution.

Previous to January 9, 1900, the Board of Directors of the H. C. Frick Coke Company was composed of five members. Upon that date, at a meeting of the stockholders of the company then held, the membership of the board was increased to seven and there were elected as members of the board, to serve one year from that date, the defendants, Thomas Lynch, H. C. Frick, George Lauder, James Gayley, Andrew M. Moreland, D. M. Clemson and Thomas Morrison, who since said date and now compose the Board of Directors of said corporation, Lauder, Gayley, Moreland, Clemson and Morrison being also partners in and members of the Board of Managers of the Carnegie Steel Company, Limited.

Previous to January 9, 1900, neither Gayley, Moreland, Clemson nor Morrison were the owners of any shares of stock of the Coke Company, nor were they or any of them directors or officers thereof, and were interested therein only by virtue of owning several interests in the Carnegie Steel Company, Limited, and not otherwise. On or about that date there were transferred out of the shares in the Coke Company held by the Steel Company five shares of the capital of the Coke Company to each of the four defendants. It is charged that notwithstanding such transfers the shares still remain in truth the property of the Steel Company, and the transfers were made at the direction of Carnegie and the Steel Company merely and only for the purpose of qualifying the defendants to hold the office of director in the corporation.

Lauder, Gayley, Moreland, Clemson and Morrison are the representatives of the Carnegie Steel Company, Limited, and Carnegie, and were so placed upon the board of the Coke Company at the direction of Carnegie, so as to subject the acts and management of the Coke Company to the interests of the Carnegie Steel Company, Limited, and so as to have the Coke Company managed in the interest of said Carnegie and of the Steel Company and not in the interest of the other stockholders of the Coke Company not members of the Steel Company, Limited, and especially for the purpose of having the Board of Directors of the Coke Company so constituted that the resolution passed by the board at the meeting of October 25, 1899, might be rescinded and the product of the Coke

Company sold to the Steel Company at prices far below the fair value and market price thereof and so as to benefit the Steel Company at the expense of the Coke Company, Carnegie's interest in the Steel Company being proportionately very much greater than in the Coke Company.

Through the year 1899 the H. C. Frick Coke Company furnished the Carnegie Steel Company with all the Coke which they purchased for use. During the course of the year the market price of coke steadily advanced and the coke was sold by the Coke Company to the Steel Company at varying prices, ranging from \$1.45 per ton for January, February and March, 1899, to \$1.75 per ton for December, 1899. The shipments during the year amounted to 2,233,764 tons, all of which has been paid.

To carry out the purpose for which they were selected and also in order to secure for themselves and Carnegie an advantage as members of the Carnegie Steel Company, Limited, well knowing the great loss which would result therefrom to those stockholders of the H. C. Frick Coke Company who were not members of the Carnegie Steel Company, Limited, including your orators, or whose proportionate interests in the Coke Company were greater than in the Steel Company, and in utter and fraudulent disregard of their rights and against the vote and protest of Thomas Lynch and H. C. Frick, the other two members of the Board of Directors, and well knowing that the price of coke was then upward of \$3 per ton, and that the market price would probably continue during the life of the contract hereinafter mentioned to be much greater than the price named in the contract, the majority of the Board of Directors of the Coke Company—to wit, James Gayley, A. A. Moreland, D. M. Clemson and Thomas Morrison—on January 24, 1900, at a meeting of the directors of the Coke Company then held, pretending that more than a year previous thereto the Coke Company had contracted to sell to the Steel Company all the coke that the Steel Company might require for their furnaces for a period of five years, beginning January 1, 1899, at the price of \$1.35 per ton, voted to the Carnegie Steel Company, Limited, a contract for all the coke which the Steel Company would use in their furnaces for five years, commencing January 1, 1899, amounting, approximately, to 2,500,000 tons per year, or about one-third of the entire product of the H. C. Frick Coke Company, at the price of \$1.35 per ton, and the persons named produced at the meeting and demanded and procured the immediate signing by the president of the H. C. Frick Coke Company of a contract which had been previously prepared and executed by the Carnegie Steel Company, Limited, a copy of which is hereto attached and made a part hereof, marked "Exhibit A."

Your orators charge that, in truth and in fact, no such agreement to sell their product to the Steel Company as is pretended as the excuse for making the contract, and no agreement whatsoever for deliveries through a period of years or at the price named in the pretended contract was at any time made by the Coke Company or by any one authorized to act on their behalf, and the pretense thereof is only the creation of Moreland, Gayley, Clemson and Morrison, with Carnegie and Lauder, acting in the interest of Carnegie and the Steel Company for the purpose of putting forth some excuse in the execution of their evil design to cheat and defraud all the stockholders of the Coke Company other than the members of the Steel Company, Limited, and the said Lauder, Gayley, Moreland, Clemson and Morrison, directors of the Coke Company. And your orators are advised and so charge that Gayley, Moreland, Clemson and Morrison were trustees for your orators in the management of the affairs of the Coke Company and in the making of the pretended contract for their own benefit and the benefit of Carnegie and the Steel Company, who owned a majority of the capital stock of the Coke Company were bound to exercise the utmost good faith toward your orators; they not only failed to do so, as shown in this bill, but they in addition, fraudulently and for their own gain and the gain of the majority stockholders, without due regard for the interest of your orators, made and entered into the contract. They were guilty not only of constructive but also of actual fraud.

Your orators show that the general market price of coke manufactured by the Frick Coke Company throughout the year 1899 was greatly in excess of \$1.35 per ton; and in the month of January, 1900, and at the time of the signing of the alleged contract, and still is at least \$3 per ton, and in all probability will continue to be greatly in excess of \$1.35 per ton throughout the term of the alleged contract; that the price of \$1.35 per ton is so near the actual cost of such coke as not to leave a reasonable profit thereon, nor to provide against any increase in the cost of manufacture or the usual contingencies incident to the manufacturing business; and that in many other respects the contract is unusual in its terms and purposely so made as to be in the interest of the Steel Company at the expense of the Coke Company.

Your orators charge that the said contract, if carried

out, will require the H. C. Frick Coke Company to refund to the Steel Company about \$596,000 on account of coke sold to the Steel Company during the year 1899, and paid for, and this notwithstanding the fact, known to the defendants, that the sums of money so required to be refunded to the Steel Company have already been paid out and distributed by the Coke Company as dividends to their stockholders.

Your orators further say that the difference between the price named in the pretended contract and the price at which coke is now sold for delivery during the year 1900 will result in a loss to the Coke Company for said year of not less than \$4,000,000, and your orators believe and aver that the general market price of coke during the remaining years of said contract will be such as to result in a large annual loss to the Coke Company.

As soon as your orators were informed of the action of the majority of the Board of Directors of the Coke Company they addressed a written protest to the president and directors of the company and demanded that they at once rescind the action and annul the pretended contract so made; and in case they refused to take such action that they immediately call a meeting of all the stockholders of the Coke Company to take action and pass upon the demand so made. A true copy of said written protest is hereto attached, marked "Exhibit B." After receiving this communication the Board of Directors of the Coke Company met, and Gayley, Moreland, Clemson and Morrison, the representatives of Carnegie and members of the Carnegie Steel Company, Limited, acting as directors of the Coke Company, passed a resolution in answer to the protest that the Coke Company would proceed to carry out and perform the aforesaid pretended contract for the entire period therein named, and accordingly replied to the protest, as shown by "Exhibit C." The Coke Company so controlled by these directors has been since the making of the contract, is now and will continue to make all deliveries under the terms of this so called contract for coke to the Steel Company at the price therein named.

Wherefore, your orators need equitable relief and pray:

1. That now by preliminary injunction to be made permanent upon the final hearing, the defendants be restrained and enjoined from selling, shipping and delivering any coke to the Carnegie Steel Company, Limited, under and in pursuance of the pretended contract, "Exhibit A," and from settling with the Steel Company for coke heretofore delivered at the price named in said contract.

2. That your honors order, decree and adjudge that the above recited action of the Board of Directors of the H. C. Frick Coke Company and the said pretended contract, "Exhibit A," made with the Carnegie Steel Company, Limited, in pursuance thereof, are null and void and in nowise valid or binding upon the Coke Company.

3. That an account be taken of all coke delivered under the pretended contract and the general market price thereof at time of such deliveries, and that the Carnegie Steel Company, Limited, be ordered and directed to pay to the H. C. Frick Company the fair market price therefor as it may be found by the court.

Exhibit A.

This agreement witnesseth that the H. C. Frick Coke Company have sold to the Carnegie Steel Company, Limited, and their successors or assigns in business all the coke that the Steel Company shall require for their furnaces for the period of five years, beginning January 1, 1899, at the price of \$1.35 per ton of 2000 pounds, delivered f.o.b. cars at ovens, payable on or before the 20th day of each month for the preceding month's shipments, and that the Steel Company have purchased said coke and agreed to pay therefor at the price and on the terms aforesaid.

This agreement, taking effect as of date January 1, 1899, is executed and delivered in pursuance of resolutions of the Board of Directors and Board of Managers of said respective companies.

Executed and delivered this 24th day of January, A. D. 1900.

H. C. FRICK COKE COMPANY,
THOS. LYNCH, President.
THE CARNEGIE STEEL COMPANY, LIMITED,
C. M. SCHWAB, Manager.
A. M. MORELAND, Manager.

Exhibit B.

To the President and Board of Directors of the H. C. Frick Coke Company.

Gentlemen:—I have been informed that your Board of Directors on January 24, 1900, passed a resolution intended to ratify an alleged contract with the Carnegie Steel Company, Limited, whereby your company are to supply to the latter all the coke they may require for use in their furnaces for five years, commencing January 1, 1899, for \$1.35 per ton, delivered on cars at your works,

and that your company have signed a written memorandum of such contract.

As a stockholder in your company I protest against any such contract, and I demand that you do nothing in recognition thereof, and especially that you do not ship or bill any coke to the Carnegie Steel Company, Limited, thereunder; and that you do not settle with said company for coke shipped to them since January 1, 1899, at the price named in said contract, or at any price other than the market price at the time of delivery. I deny that such contract was ever made until you attempted to do so on January 24, 1900. This contract is for many reasons unfair and fraudulent and against the minority stockholders of the H. C. Frick Company. It is made by those who represent the majority of stockholders, really in the interest of such majority, as against the interests of the H. C. Frick Coke Company and the minority stockholders therein. The market price of coke on January 24, 1900, was at least \$3.50 per ton, and yet this contract, covering almost one third of all coke manufactured by the company, fixes a price of \$1.35 per ton. In many other respects it unfairly and dishonestly favors the majority stockholders of the coke company to the loss of the minority stockholders.

The Carnegie Steel Company, Limited, and Andrew Carnegie (who owns more than one-half of the interests in the Steel Company) own together more than one-half of the stock of the H. C. Frick Coke Company. A majority of the present Board of Directors of the Coke Company are managers and partners in the Carnegie Steel Company. It was this majority who forced this contract in favor of the Carnegie Steel Company, Limited, on January 24, 1900.

I demand that you rescind the said action of your board in favor of said contract; that you take such further action as may be necessary to rescind and annul said contract. If you refuse to act, then I ask that you call a meeting of the stockholders of the Coke Company to take action and pass upon the questions herein raised, and upon the requests I now make.

Please advise me promptly what your company proposes to do in the matter, as it is my intention to take proper legal steps to prevent your so doing, if you intend carrying out such pretended contract.—Yours truly,

"Exhibit C."

PITTSBURGH, February 6, 1900.

MR. S. L. SCHOONMAKER, New York City:

My Dear Sir.—I beg to advise that I received your communication of 1st inst., addressed to the president and Board of Directors of the H. C. Frick Coke Company, and I submitted the same to the board at a meeting held February 6, 1900, when the following motion was adopted:

"That the president be instructed to carry out the contract between the H. C. Frick Coke Company and the Carnegie Steel Company, Limited, dated January 24, 1900 taking effect January 1, 1899, and all its terms and provisions, and that he inform Messrs. Walker and Schoonmaker that he is so directed by the board."—Very truly yours,

THOS. LYNCH, President.

MANUFACTURING.

Iron and Steel.

As already noted in these columns, the Hollidaysburg Iron & Nail Company, Hollidaysburg, Pa., have been reorganized and a new charter granted, with a capital stock of \$100,000. The works were put in operation last week and will manufacture merchant bar iron and iron cut nails. When in full operation the plant will employ about 150 men. J. D. Hemphill is president, J. W. Bracken treasurer, and Thos. J. Hemphill secretary.

The Sargent Company of Chicago, Ill., will start three Tropenas converters about March 15.

The rolling mill of the Ohio Iron Company, at Zanesville, Ohio, recently purchased by S. R. Wells of Greenfield, Ind., for \$32,500, has been started.

The Continental Iron Company of Niles, Ohio, who recently purchased the Wheatland rolling mill, at Wheatland, Pa., have dismantled the girder and rail mill and have installed in its place a plate mill. In addition to muck bar the company will hereafter produce plate and skelp iron.

The consolidation of the Whitaker Iron Company, Wheeling, W. Va., manufacturers of black and galvanized sheets, with the Wheeling Corrugating Company has been in contemplation for more than a year, and the recent consolidation was not in any respect whatever prompted by relations existing or likely to exist in connection with the recent sheet combination. The consolidation was merely carrying out a programme that has long been in contemplation, and was only deferred a year ago because of the movement then inaugurated by the tin plate and steel works, which at the time it was thought would likely take up the question of taking over the sheet mills. The capital stock of the Wheeling Corrugating Company having been limited to a

maximum of \$150,000, it was found desirable and necessary to apply to the Secretary of State of West Virginia for an increase to \$5,000,000 to admit of the carrying out of the plans in contemplation. The Whitaker Iron Company are one of the sheet mills that have not been taken over by the recently organized American Steel Sheet Company, but are in close touch with the sentiments of that organization and will act in harmony with it.

The Vesuvius Iron Company of Pedro, Ohio, have wound up their business. The furnace has been leased by the Vesuvius Charcoal Iron Company and will go in blast May 1. The parties who did run the Vesuvius Furnace are now preparing to run the Center Furnace on warm blast charcoal iron, and will blow in May 1, 1900. Their post office address is Laird, Lawrence County, Ohio.

The National Tube Company have made application for a charter for the Benwood & Wheeling Connecting Railway. The authorized capital stock is \$1,000,000, and the incorporators are Frank J. Hearne, J. N. Vance, J. D. Culbertson, L. E. Sands and N. B. Scott, all prominently identified with the National Tube Company. It is the intention of this concern to make very extensive improvements and additions to the Riverside Department at Wheeling.

The Seamless Tube Works of the National Tube Company, at Christy Park, McKeesport, Pa., are to be enlarged to about double the present size. During the Spanish-American war large orders for projectiles were turned out at this plant.

The Laughlin Nail Company, Wheeling, W. Va., who are building a new shovel works at Martin's Ferry, Ohio, advise us that they will not have the works completed and in operation much before March 15. There has been considerable delay in securing machinery. The cut nail factory of this concern is not now in operation, but it is probable it will be started up after the shovel plant is put in operation. Their cut nail factory is the largest in the United States and contains 226 cut nail machines.

At the annual meeting of the Pottstown Iron Company of Pottstown, Pa., the following directors were elected: Andrew Wheeler, T. H. Morris, Austin Heckscher, W. G. Brown, Horace Evans, George M. Malsberger and Leonard Peckitt. The three latter take the places of Richard H. Downing, H. A. Berwind and George T. Barnes, resigned. The new directors represent out of town interests in the company. Mr. Evans is president of the National Bank of Pottstown; Mr. Malsberger is also of Pottstown, and Mr. Peckitt of Catasauqua is president of the Empire Steel & Iron Company. The organization of the board was postponed. The president's annual report showed a material increase in the earnings for the year. No action was taken to-day on the proposed lease of the steel plant to the Glasgow Iron Company.

Geo. W. McClure, Son & Co., engineers and contractors, Smith Block, Pittsburgh, Pa., have received a contract from the Republic Iron & Steel Company for the building of three McClure and Amsler patent three pass fire brick stoves, for the Pioneer Mining & Manufacturing Company, at Thomas, Ala. These stoves will be 21 feet in diameter and 85 feet high.

In addition to the building of 14 50-ton basic open hearth furnaces and a new blooming mill at the Duquesne Steel Works, the Carnegie Steel Company have decided to build a small continuous billet mill at these works, capable of rolling down to 1½ inch from the ingot, in the initial heat. These works will be able, when additions now under way have been completed, of furnishing billets, slabs and sheet bars of open hearth and Bessemer stock, and in any size desired by the trade.

The Iroquois Iron Company, Monadnock Block, Chicago, have begun to make arrangements for the erection of a second blast furnace at their plant at South Chicago. The new furnace will be somewhat larger than the present one, and it is expected will be able to turn out a product of 300 tons a day. The blowing engines have already been purchased and other material is being contracted for as rapidly as possible. It is intended to make this new furnace one of the most modern in every respect. Julian Kennedy is the consulting engineer. The company are making extensive improvements at their plant, among other things replacing their old dock with a new one. They had previously built about 700 feet of new dock, and when the old one is replaced they will have a completely new dock running the entire length of their property. They recently purchased two vessels for transporting ore, which will make them independent on the transportation question.

We can state officially that the report that Jones & Laughlins, Limited, of Pittsburgh, would go into the manufacture of armor plate on an extensive scale is entirely without foundation. The report probably arose from the fact that this concern have some large additions to their plant under way, but the manufacture of armor plate has not been contemplated at any time.

Furnace D of the Edgar Thomson plant of the Carnegie Steel Company, Limited, at Bessemer, Pa., will be blown out for repairs and relining. It is probable the furnace will be enlarged and the capacity brought up to 600 tons per day.

The Cambria Steel Company, Johnstown, Pa., have decided to build several new blast furnaces, a new open hearth plant and a new universal mill. Work on these additions will be commenced in a short time.

The Kelly Nail & Iron Company, Ironton, Ohio, manufacturers of wire and cut nails, advise us that they are turning out 1500 kegs of nails per day. They have purchased more machines and will increase their capacity.

Work has been suspended at the Corns Works of the Republic Iron & Steel Company, at Massillon, Ohio.

The Manistique Iron Company have been organized to operate the Weston charcoal furnaces at Manistique, Mich., the stockholders being P. H. Griffin, T. Gullford Smith, W. P. King and C. E. Levett of Buffalo, N. Y., and E. H. Flinn of Detroit, Mich. The furnace is to go into blast at an early date.

The Huntingdon Malleable Iron Company, Huntingdon, Pa., have been incorporated with a capital of \$100,000 by W. S. Gans, M. Liveright, A. Gans and others.

On February 25 fire destroyed three buildings of the Troy Malleable Iron Works, causing an estimated loss of over \$100,000 and throwing many hands out of employment.

At the annual meeting of the Troy Steel Company, held on February 20, the following directors were elected: H. H. Rogers, New York; Frank S. Witherbee, Port Henry; Junius S. Morgan, Princeton, N. J.; George A. Bell, Troy; William Kemp, Troy; Charles W. Tillinghast, Troy; Lysander B. Danforth, Lansingburgh.

Machinery.

Thomas Carlin's Sons Company, operating foundry, machine and boiler works, River avenue, Allegheny, Pa., will erect a one-story ironclad building, ground for which has already been broken. It will be devoted to foundry purposes and will contain an electric plant.

The Brown Engine Company of Pittsburgh have received a contract for the erection of five 250 horse-power engines from the International Paper Company, at Cornish, N. Y.

At the annual meeting of the Stilwell-Bierce & Smith-Vaile Company, at Dayton, Ohio, J. H. Valle was elected president, to succeed R. N. King, and E. P. Platt was elected treasurer in place of F. H. Jones.

The great and continued increase in the demand for the pneumatic tools made by the Chicago Pneumatic Tool Company has necessitated an enlargement of their manufacturing plants, and some considerable changes are planned in that direction. The Boyer shops in St. Louis will be removed to Detroit, Mich., where the capacity will be more than doubled, and the new plant will have an equipment that will place it in the front rank of the mechanical industries in this country. J. W. Duntley, the president of the Chicago Pneumatic Tool Company, has recently purchased the plant of the Olney Metal Company in Philadelphia, which is located on a tract of 5 acres, with railroad side track running into the works. The main building is of steel construction, about 120 x 300 feet, and with the auxiliary buildings will enable them to establish a most complete plant at that place. They will remove their Whitelaw shops from St. Louis to Philadelphia, and will consolidate with them the plant of the National Pneumatic Tool Company, recently purchased, adding additional equipment which will give them considerably more than double the output of the present Whitelaw and National shops. The factories as at present located are running day and night to supply the demand, and these changes must necessarily be consummated at the earliest practicable date.

Arrangements have been made whereby the half interest in the foundry and machine shop of the C. H. Woodruff Company, at Elgin, Ill., owned by O. W. Potter of Chicago, will be transferred to Alfred Edwards of Dundee, Ill. The latter is one of the mechanical experts of the Illinois Iron & Bolt Company and is a son of Henry Edwards, formerly president of the company.

The Pennsylvania Malleable Company of Pittsburgh, who are building a new plant at McKee's Rocks, expect to cast gray iron by March 15, and malleable by April 1.

Fred. C. Starke is at the head of a movement to complete a forge and machine shop at Milwaukee, Wis.

The C. & G. Cooper Company, Mt. Vernon, Ohio, manufacturers of Corliss engines and boilers, have recently installed power for rolling mills as follows: Chester Rolling Mills, East Liverpool, Ohio, a tandem engine, cylinders 56 x 52 x 60, geared to jack shaft; fly wheel, 100,000 pounds, arranged for driving rolls for sheet mills. Paige Woven Wire Fence Company, Monaca, Pa., a tandem Corliss compound engine, cylinders 30 x 52 x 60; rope wheel, 180,000 pounds, to drive Garrett Wire Mill. Frank-Kneeland Machine Company, Pittsburgh, for driving machinery of the National Stamping Company, Granite City, Ill., two pairs of tandems, cylinders 36 x 56 x 60; wheels weighing 200,000 pounds each. These engines are for driving rolls for sheet mills. Also a single cylinder 22 x 42 engine for a cold rolled mill, same party. Two tandems, cylinders 24 x 48 x 48; wheels 80,000 pounds each, for driving two Morgan Construction Company's continuous rod mills. The above are recent installations. They are filling a large number of orders for electric railways and for cotton mills and other manufacturing purposes in various parts of the country and for export.

The Wm. D. Gibson Company, manufacturers of high grade crucible cast steel spiral and flat springs for all kinds of machinery, have removed their offices and factory from their old location at 12 and 14 South Jefferson street to 23 and 25 North

Clinton street, Chicago. The officers of this company are Silas Howe, president and treasurer, and Enoch Peterson, vice-president and secretary. They issue a very comprehensive catalogue of their products.

The D. Kelly Ice Plant & Gas Storage Company, Columbus, Ohio, have started work on their new building. Two 60-ton ice making and refrigerating machines will be used, besides other machinery, engines and boilers.

The Rarig Engineering Company, Columbus, Ohio, are making some extensive additions to their plant, which will very greatly increase their capacity. A brick and steel addition 130 x 60 feet and one story high is being built to be used as an erecting room. As soon as the addition is completed a 50-ton Case crane, 14 x 20 foot boring mill, an 8 x 30 foot planer and other tools will be installed. A 20-ton electric crane will be placed in the old shops this week. A new office building is being erected, and the entire plant is being remodeled. The output of the foundry will be doubled. The company report a good demand from foreign and domestic buyers. A contract for mortar carriages for the United States Government is being filled. A double cross compound blowing engine is being built for a Montana firm. A double cross compound engine, 42 x 80, with 60-inch stroke, weighing 1,500,000 pounds, with a 24-foot fly wheel weighing 120,000 pounds, is being built for the Republic Iron & Steel Company.

At the recent annual stockholders' meeting of the Ransom Gas Machine Company, New York, the following officers were elected: President, Charles E. Remick; vice-presidents, Addison Brill and W. T. Jermy, and Arthur D. Hamblin, secretary and treasurer.

The Westinghouse Machine Company of East Pittsburgh have completed and installed recently in a plant near Pittsburgh a 1500 horse-power steam turbine. Two or three more turbines of the same capacity are being erected and will be installed before long. Some strong claims are made for this type of engine as regards efficiency and low cost of operation.

The Columbus Malleable & Gray Iron Casting Company, Columbus, Ohio, have been incorporated, with a capital of \$25,000. Ground has been purchased near the plant of the Case Mfg. Company, in Columbus, and work on the erection of a plant will be commenced at once.

The Franklin Air Compressor Company will build a plant at Franklin, Pa., to manufacture pneumatic tools.

At the recent annual stockholders' meeting of the New Britain Machine Company, New Britain, Conn., the following officers were elected: President, Philip Corbin; treasurer, F. G. Platt; vice-president, M. C. Swift, and R. S. Brown, secretary.

Hardware.

The Badger Brass Company, Kenosha, Wis., began the manufacture of the Solar acetylene gas bicycle lamp three years ago, and sold 20,000 of them that year. In 1898 sales increased to 80,000 lamps, and last year the total sold reached 150,000. From present indications the company expect the sales to run up to at least 250,000 this year. The company enjoy an export as well as domestic trade.

Louden Machinery Company, Fairfield, Iowa, advise us that business during 1899 was fully double that of 1898, and the indications now are that the present year will show a substantial if not a proportionate increase over last year.

The A. A. Wood & Sons Company, Atlanta, Ga., are building 500 gin saw gummers, 300 saw filers and 1000 levels for farmers' and builders' use. They are also rebuilding 1300 telephones for the Southern district of the Bell Telephone Company. They are makers of special tools of all classes, also special screws, and milled, turned and punched shapes and dies for sheet metal work. They are preparing to place on the market an improved hollow auger and other carriage makers' tools. The amount of work contracted for, it is expected, will keep the firm busy until the end of August.

Miscellaneous.

The Berlin Mfg. Company have been incorporated in New Jersey with a capital of \$200,000, to manufacture railroad cars, street cars, trucks, wheels, &c.

The stockholders of the Foster Stove Company met in Ironton, Ohio, last week and re-elected the following Board of Directors: H. A. Marting, O. P. Doty, C. A. Hutsinpillar, J. D. Foster, L. E. Marting, Ernest Horschel and Charles Alexander. The board organized by the re-election of the following officers: J. D. Foster, president; C. A. Hutsinpillar, vice-president; L. E. Marting, secretary and treasurer; Charles Alexander, foreman. An annual dividend of 6 per cent. was declared.

The Standard Steel Range Company of Cleveland, Ohio, have purchased the buildings formerly occupied by the Aurora Vapor Stove Company. They have an area of 75,000 square feet of floor space.

The Morse Iron Works & Dry Dock Company, recently incorporated with a capital of \$550,000, have purchased the Atlantic Yacht Club property on the water front near Bay Ridge, Brooklyn. It is stated that a large dry dock, capable of accommodating the heaviest ships in the navy, will be built on the site. The property acquired is 360 x 330 feet in area, extending out 700 feet from the shore line. The plant proper will be erected on the shore property.

The Iron and Metal Trades.

There have been no developments during the week which might be interpreted as conclusive evidence that the market is turning one way or the other. It is still all a matter of inference and of argument. With the enormous interests at stake nervousness and impatience are unusually great, and yet we have not really entered the time when the important spring trade ought to develop. As a matter of fact producers in those lines in which it is the keynote for the whole year will be forced to face the hesitation and the delays on the part of buyers, which a relatively high level of prices must bring.

Pittsburgh again reports a fairly active Bessemer market, about 30,000 tons having been taken by large consumers. On Forge and Foundry grades that center and the other Western distributing markets report dullness and an easing tendency. In Philadelphia some good lots have been sold, but apparently at concessions. That market closes, however, with a better tone.

Reports from Germany prove that some round lots of Southern Foundry Iron have been purchased there, and a demand has also developed for Basic Pig from that quarter.

Steel Billets are generally very quiet. From Philadelphia comes the report of the sale of 2000 tons at \$35. delivered at Eastern Pennsylvania mill.

The Structural Material market continues in a very good condition. Good orders are being taken, and considerable new work is coming up. Among the contracts on which figuring is going on is one for 5000 tons for the Manhattan power house in New York City. So far as we can learn negotiations are proceeding actively for the material for the Rapid Transit tunnel, and the Steel may soon be closed for.

A nice order for Structural Material has been taken by an Eastern mill for export to Japan.

A denial of the stories current concerning an advance in the price of Wire and its products, to take effect at once, comes from the highest sources. Present indications are that the demand for Wire Nails promises to be quite good, the whole country being bare of stocks. On the other hand it is not expected that the consumption of Barb Wire this year will come up to the maximum, which is below 200,000 tons per annum.

The export demand has fallen off a little lately, because some markets are quite well supported by former purchases. As against that new channels of consumption all over the world are being opened.

The leading interest in the Merchant Pipe industry has just issued a new price-list. Some heavy inquiries for Line Pipe are in the market. Skelp has lately shown greater strength in the Pittsburgh district.

Coke prices are still climbing, and it looks as though the producers, in spite of recent expansion, will be under pressure for many months to come.

A Comparison of Prices

At date, one week, one month and one year previous

Advances Over the Previous Month in Heavy Type.
Declines in Italics.

	Feb 23, 1900.	Feb 21, 1900.	Jan 31, 1900.	Mar. 1, 1899.
PIG IRON:				
Foundry Pig, No. 2, Standard, Philadelphia.....	\$22.50	\$22.50	\$22.75	\$13.50
Foundry Pig, No. 2, Southern, Cincinnati.....	20.25	20.25	20.25	12.50
Foundry Pig, No. 2, Local, Chicago.....	23.50	23.50	23.50	13.00
Bessemer Pig, Pittsburgh.....	24.00	24.50	24.90	13.50
Gray Forge, Pittsburgh.....	21.00	21.00	21.25	12.50
Lake Superior Charcoal, Chicago....	25.50	25.50	25.50	14.00
BILLETS, RAILS, ETC.:				
Steel Billets, Pittsburgh.....	33.00	33.50	33.00	22.00
Steel Billets, Philadelphia.....	35.00	36.50	36.50	24.00
Steel Billets, Chicago.....	nom	nom	nom	23.00
Wire Rods, Pittsburgh.....	nom	nom	nom	nom
Steel Rails, Heavy, Eastern Mill....	35.00	35.00	35.00	23.00
Spikes, Tidewater.....	2.60	2.65	2.65	1.55
Splice Bars, Tidewater.....	2.30	2.20	2.30	1.20
OLD MATERIAL:				
O. Steel Rails, Chicago.....	19.00	19.00	19.00	9.00
O. Steel Rails, Philadelphia.....	22.00	22.00	22.50	12.75
O. Iron Rails, Chicago.....	23.00	23.00	24.00	14.50
O. Iron Rails, Philadelphia.....	26.00	26.00	26.00	16.00
O. Car Wheels, Chicago.....	24.00	24.00	24.00	14.50
O. Car Wheels, Philadelphia.....	22.00	22.00	22.00	13.50
Heavy Steel Scrap, Chicago.....	17.00	17.00	17.50	8.00
FINISHED IRON AND STEEL:				
Refined Iron Bars, Philadelphia.....	2.20	2.20	2.20	1.25
Common Iron Bars, Youngstown....	2.15	2.15	2.15	1.15
Steel Bars, Tidewater.....	2.40	2.40	2.40	1.35
Steel Bars, Pittsburgh.....	2.25	2.25	2.20	1.25
Tank Plates, Tidewater.....	2.10	2.25	2.35	1.70
Tank Plates, Pittsburgh.....	2.05	2.10	2.20	1.60
Beams, Tidewater.....	2.40	2.40	2.40	1.55
Beams, Pittsburgh.....	2.25	2.25	2.25	1.40
Angles, Tidewater.....	2.40	2.40	2.40	1.40
Angles, Pittsburgh.....	2.25	2.25	2.25	1.30
Skelp, Grooved Iron, Pittsburgh....	1.97½	1.95	1.90	1.40
Skelp, Sheared Iron, Pittsburgh....	2.25	2.25	2.25	1.50
Sheets, No. 27, Chicago.....	3.20	3.20	3.00	2.30
Sheets, No. 27, Pittsburgh.....	3.00	3.00	2.90	2.10
Barb Wire, f.o.b. Pittsburgh.....	3.80	3.80	3.80	2.35
Wire Nails, f.o.b. Pittsburgh.....	3.20	3.20	3.20	1.85
Cut Nails, Mill.....	2.50	2.50	2.50	1.40
METALS:				
Copper, New York.....	16 12½	16.25	16.50	17.75
Spelter, St. Louis.....	4.50	4.57½	4.62½	6.00
Lead, New York.....	4.70	4.70	4.70	4.30
Lead, St. Louis.....	4.57½	4.57½	4.65	4.20
Tin, New York.....	31.50	31.75	27.75	24.00
Antimony, Hallett, New York.....	9.75	9.75	9.75	10.00
Nickel, New York.....	38.00	38.00	38.00	38.00
Tin Plate, Domestic, Bessemer, 100 lbs., New York.....	4.84	4.84	4.84	3.69

Chicago.

Office of The Iron Age, 805 Fisher Building,
CHICAGO, February 23, 1900.

The time is now at hand when business should be getting more active, but generally speaking, trade can hardly be called as good as it was in January. This is certainly not due to any great decrease in consumption, but is to be credited principally to the widespread feeling among buyers that prices are likely to be lower. The heavy consumption is indicated by the fact that orders of fair size are continually being placed for quick shipment, showing that many consumers are running along with supplies sufficient only to meet their current requirements. As soon as prices are shown to be absolutely firm it is expected that a decided increase will take place in not only the number of orders but in their size. Foreign inquiries are being received for considerable quantities of various kinds of materials, including Bar Iron, Pig Iron, Rails, &c. It is expected that these inquiries will largely result in business as they are coming for the most part from concerns that have been carefully watching our markets. Increasing labor troubles are effecting local trade. The machinists of this city are now striking for shorter hours and higher wages. The labor troubles in the building trade are also getting worse instead of better.

Pig Iron.—Fair sized inquiries are being received from malleable foundrymen, who are most in need of additional supplies. Sales, however, are quite frequently made to foundrymen in the general trade who need Iron for quick delivery. A purchase of 1000 tons was thus made during the week by one of the large implement concerns. Several other transactions of the same character were closed, calling for lots of 200 to 500 tons, while the trade in carload lots has also been quite satisfactory. The demand for future delivery is light, buyers being disposed to wait for developments, influenced by the opinions now so generally expressed that prices may probably decline. Not much decline, however, can be hoped for. At a very small concession on present figures, a very considerable export trade would immediately spring up. Prices show no change, although concessions are reported to be made on our quotations by some

of the smaller Southern companies. The local furnace companies are maintaining prices firmly, as they are sold far ahead and the requirements for Steel purposes are taking practically the entire output of the largest local producers. In fact both Bessemer and Basic Pig Iron is being steadily shipped here from outside districts. We quote for cash as follows:

Lake Superior Charcoal.....	\$25.50 to \$26.00
Local Coke Foundry, No. 1.....	24.50 to 25.00
Local Coke Foundry, No. 2.....	23.50 to 24.00
Local Coke Foundry, No. 3.....	22.50 to 23.00
Local Scotch, No. 1.....	25.00 to 25.50
Ohio Strong Softeners, No. 1.....	24.50 to 25.50
Southern Silvery, according to Silicon.....	25.50 to 27.00
Southern Coke, No. 1.....	22.85 to 23.85
Southern Coke, No. 2.....	21.85 to 22.35
Southern Coke, No. 3.....	20.85 to 21.30
Southern Coke, No. 1 Soft.....	22.85 to 23.35
Southern Coke, No. 2 Soft.....	21.85 to 22.85
Foundry Forge.....	20.85 to
Gray Forge and Mottled.....	20.85 to
Southern Charcoal Softeners, according to Silicon.....	21.85 to 25.85
Alabama and Georgia Car Wheel.....	24.85 to 25.85
Malleable Bessemer.....	25.00 to 26.00
Standard Bessemer.....	..... to
Jackson County and Kentucky Silvery, 8 per cent. Silicon.....	32.30 to 32.80

Bars.—The character of specifications on Bar Iron contracts is improving. They are now of good size and represent desirable assortments, showing that consumers are being compelled by their necessities to take in the material thus ordered. Manufacturers are feeling greatly encouraged by this condition of affairs, and believe that the new business which they are now receiving to only a limited extent must show considerable increase in the near future. A better feeling is observed in Soft Steel Bars, and much more new tonnage is being placed. The sales in this line for the past week will compare favorably with if, in fact, they do not surpass those of any previous week this year. Prices for mill shipment are still quoted at 2.30c. to 2.40c., Chicago, for Common Iron; 2.35c. to 2.45c. for Soft Steel Bars, and 2.65c. for Bands. Jobbers report a very good demand from stock, and are able to hold prices steadily at 2.90c. for Bar Iron, 2.60c. to 2.65c. for Soft Steel Bars, and 4c. for Norway and Swedish Iron.

Car Material.—Good purchases are being made of Car Axles, Channels and other special material required by car builders. The orders for new cars are not so large as they have been, but every week sees some orders being placed. One of the local railroad companies recently inquiring for a considerable number of Steel cars concluded to defer placing the order for the present.

Structural Material.—Some bridge work is in sight on railroad account, one of the Western roads being about to close a contract for 4000 tons, while other smaller inquiries are now under negotiation. Specifications are being received for good quantities of material on old contracts, both for bridge work and for buildings. New business in the building line is light except for small lots which are in fair demand. Building operations in this city are almost stopped by the labor troubles, only a few jobs now nearly finished being under way. Prices are firmly held. Mill shipments are quoted as follows, Chicago delivery: Beams, Channels and Zees, 15-inch and under, and Angles, 3 to 6 inches, 2.40c.; Beams, &c., 18 inches and over, and Angles over 6 inches and under 3 inches, 2.50c.; Tees, 2.45c.; Universal Plates, 2.40c. Local yards are quoting small lots of Beams and Channels at 2.90c. to 3c.; Angles, 2.70c. rates, and Tees, 2.85c.

Plates.—The situation seems to be no better as to prices. Lower quotations are being made. Some inquiries are being received from the West for Plates for Riveted Pipe, and the demand for small lots for general purposes in this immediate locality is fairly good. The demand from store is also rather satisfactory. Prices have now gone to a point which would seem to promise a little more stability. Quotations on mill shipments, Chicago delivery, are as follows: Tank, 2.35c. to 2.40c.; Flange, 2.55c. to 2.60c.; Marine, 2.85c. to 3c.; Fire Box, 3.30c. to 5.50c. Jobbers quote Tank from store at 2.70c. to 2.80c., and Flange, 3c. to 3.25c.

Merchant Pipe.—Some improvement is observed in the demand, and both manufacturers and jobbers are quite well pleased with conditions as they now find them. Carload lots of Black Merchant Pipe are quoted at 50, 10 and 5 to 50 and two 10's, and Galvanized Pipe at 57 and two 10's, but a new price-list will go in effect March 1.

Sheets.—Considerable business is being offered to mill representatives at prices slightly under those which have recently been named, but they are firmly held, and it appears probable that large buyers will hold off for some little time longer to more thoroughly test the situation. Mill shipments are quoted at 3.20c. to 3.30c., Chicago, for No. 27 Black, and 75 off for Galvanized Sheets. Jobbers are having an excellent trade and continue to quote

small lots from stock at 3.45c. for No. 27 Black, and 70 and 10 off for Galvanized.

Merchant Steel.—The city trade is unfavorably affected by the strike among the machinists. This has caused a number of machinery establishments to either shut down or seriously diminish their consumption of material. Orders for small lots are being received from outside localities, but the volume of business at present is not large. Mill shipments, Chicago delivery, are quoted as follows: Smooth Finished Machinery Steel, 2.95c. to 3.05c.; Smooth Finished Tire, 2.80c. to 3c.; Open Hearth Spring Steel, 3.60c. to 3.75c., base; Toe Calk, 3.20c. to 3.50c., base; Sleigh Shoe, 2.75c. to 3c.; Cutter Shoes, 3.45c. to 3.65c.; Ordinary Tool Steel, 7c. to 7½c.; Special, 13c. and upward.

Billets.—The Southern manufacturers of open Hearth Billets are now taking some business in this locality. Good orders have recently been secured for Billets for Car Axle purposes, on which the prices made are about \$41 to \$42, Chicago. The Steel works soliciting business of this character are at Ensley, Ala., and Middlesboro, Ky.

Rails and Track Supplies.—Good inquiries are still being received for Rails of Standard Sections, and more or less tonnage is being placed. About 5000 tons were contracted for during the past week, and prices are firmly held at \$35 to \$40, according to quantity. The demand for Light Rails keeps up, and more inquiries are being received for export. Prices are maintained at \$35 to \$40, according to section. Good sales are reported of Track Fastenings. Prices of Track Fastenings are as follows: Steel Fish Plates, 2c. to 2.25c.; Iron Fish Plates, 2.30c.; Spikes, 2.65c. to 2.75c.; Track Bolts, with Hexagon Nuts, 3.95c. to 4c.; Square Nuts, 3.80c. to 3.85c.; Steel Links and Pins, 3.20c.; Iron Links and Pins, 3.15c.

Old Material.—A little more activity is observed in the general Scrap trade, but dealers are apparently buying more generally than consumers. The supply of some kinds of Old Material is not so abundant, and prices, therefore, are soon expected to show some improvement. Lower quotations are, however, being made in some instances, particularly Cast Scrap. Old Iron Rails are weaker, and sales have been made at \$21.50, East St. Louis. The supply of Old Iron Rails is evidently considerably in excess of the current demand. Approximate market prices are as follows, per gross ton:

Old Iron Rails.....	\$23.00 to \$24.00
Old Steel Rails, mixed lengths.....	19.00 to 20.00
Old Steel Rails, long lengths.....	21.00 to 21.50
Relaying Rails.....	28.00 to 30.00
Old Car Wheels.....	24.00 to 24.50
Heavy Melting Steel Scrap.....	17.00 to 18.00
Mixed Steel.....	12.50 to 13.00
Iron Fish Plates and Angle Bars.....	23.00 to 23.50
Steel or Mixed Iron and Steel ditto.....	18.50 to 19.00
Iron Car Axles.....	26.50 to 27.00
Steel Car Axles.....	23.50 to 24.00
No. 1 Railroad Wrought.....	22.50 to 23.00
No. 2 Railroad Wrought.....	19.00 to 19.50
Shafting, Iron and Soft Steel.....	19.00 to 20.00
No. 1 Wrought.....	16.00 to 17.00
No. 1 Country Wrought.....	14.00 to 15.00
No. 1 Mill.....	11.00 to 11.50
No. 2 Mill.....	7.50 to 8.00
No. 1 Busheling.....	13.50 to 14.00
No. 2 Busheling.....	9.50 to 10.00
Iron Car Axle Turnings.....	14.00 to 15.00
Soft Steel Car Axle Turnings.....	13.00 to 13.50
Machine Shop Turnings.....	12.00 to 12.50
Wrought Drillings.....	11.00 to 11.50
Cast Borings and Drillings.....	8.50 to 9.00
Mixed Borings and Turnings.....	8.50 to 9.00
No. 1 Boilers, cut.....	12.50 to 13.00
No. 2 Boilers, cut.....	6.00 to 6.50
Boiler and Ship Scrap.....	15.00 to 16.00
No. 1 Cast.....	13.50 to 14.00
No. 2 Cast.....	9.00 to 9.50
Railroad Malleable Cast.....	15.00 to 15.50
Agricultural Malleable Cast.....	13.50 to 14.00

Metals.—No change is observed this week, and quotations are continued at 16½c. on carload lots of Lake Superior, and 16¼c. on Casting Brands, while Pig Lead is held at 4.65c. for Desilverized and 4.75c. for Corroding.

N. B. Lewis, for many years the Western manager for the late Union Iron & Steel Company of Youngstown, has accepted a position in the sales department of the Republic Iron & Steel Company, Stock Exchange Building, Chicago. Mr. Lewis has a wide acquaintance in the Western Iron trade, and his many friends will be pleased to learn that he is still in a line to serve them.

The United American Iron & Steel Company of Albany, N. Y., have been granted articles of incorporation. The company's plant is on Van Rensselaer Island, occupying part of the old Perry Stove Company's property. The capital stock of the company is \$25,000, divided into 250 shares of \$100 each. David H. Friedman is the president of the company and Moses J. Frank and William E. Friedman, also of Albany, are interested.

Pittsburgh.

Office of *The Iron Age*, Hamilton Building, }
PITTSBURGH, February 28, 1900. }

(By Telegraph.)

Pig Iron.—We can report sales of probably 30,000 tons of Standard Bessemer Iron in large lots by the furnaces to consumers at \$24 a ton, Valley. There have also been sales of stray lots of Bessemer, ranging from 500 to 1000 tons or more, at prices as low as \$24, and up to \$24.50, Pittsburgh. Probably 3000 to 4000 tons have been sold at these prices. These small lots of Iron are in the hands of middlemen and brokers. There have also been sales of 4000 or 5000 tons of local Gray Forge at \$21, f.o.b. Pittsburgh. The market on Gray Forge is weaker, and on a firm offer \$21 might be shaded. Valley Gray Forge is being quoted as low as \$20.25, and up to \$21 by the furnaces. Southern Gray Forge is weak at \$20.50, Pittsburgh, and a good deal of Eastern Forge is being offered in Pittsburgh at the same price. Foundry Irons are quiet and weak in price. On a firm offer No. 2 Soft Foundry could be bought at \$22.75, Pittsburgh, or possibly less. We quote Gray Forge, \$20.25 to \$21; Bessemer, \$24, both at Valley furnace; No. 2 Southern Foundry at \$22.25 to \$22.50; No. 2 local Foundry, \$22.75 to \$23; Local Gray Forge, \$21; Bessemer in small lots, \$24 to \$24.50; in round lots from furnaces, \$24, Valley, or \$24.90, Pittsburgh. We note sales of Standard Bessemer of about 20,000 tons at \$24, Valley, for March delivery, also 3500 tons of Gray Forge and 1000 tons of Gray Forge at \$21, Pittsburgh.

Steel.—The Steel market continues quiet. Only small lots are being sold at prices ranging from \$33 to \$34, at mill. It is reported that in exceptional cases the lower price has been shaded.

Sheet Bars.—The Sheet Bar market is quiet, and we quote nominally at \$36, at mill, for long lengths.

Muck Bar.—The market is quiet and prices are weaker. We quote standard grades at \$32.50 to \$33, f.o.b. Pittsburgh.

Coke.—Prices on Coke are climbing higher, and a leading Steel interest is reported to have bought a round lot of Coke in the last couple of days at \$4 a ton. Open contracts for Furnace Coke for first six months have been made at this price. Coke is so scarce that it can hardly be had, and buyers are willing to pay any price to get it.

(By Mail.)

Structural Material.—As noted last week, a great deal of bridge work is being placed, one recent contract calling for about 6000 tons, the business going to an Eastern mill. A great deal of work is being figured on and the mills expect a busy season. The tone of the market is strong and there is no indication whatever of any weakness in prices. Should any change be made it is more than likely it would be an advance in prices. We quote: Beams and Channels, 15-inch and under, 2.25c.; over 15-inch, 2.35c.; Angles, 3 to 6 inch, 2.25c.; Angles, smaller than 3-inch and larger than 6-inch, 2.35c.; Flat Bars, 2.25c.; Pins, 2.25c.; Grooved Rolled Plates, 2.30c. to 2.35c.; Universal Mill Plates, 2.30c. to 2.35c.; Tees, 3-inch and larger, 2.30c.; Zees, 3-inch and larger, 2.25c., all f.o.b. Pittsburgh.

Sheets.—We can report an active demand for both Black and Galvanized Sheets, and indications are that prices will be higher. While considerable work is still to be done on the consolidation of the majority of the Sheet mills into the American Steel Sheet Company, yet it is believed the deal will be put through at an early date. It is understood that the financial details have been practically arranged. Mills, with possibly one or two exceptions, do not seem disposed to sell ahead. We quote: No. 27 Black Sheets, box annealed, one pass, at 3c.; No. 28, 3.10c.; Galvanized Sheets, 75 per cent. off, 15c. freight.

Plates.—Comparatively low prices continue to be made on narrow Plates, and it is reported that on very desirable lots, involving large tonnage and nice sizes to roll, close to 2c. has been done. We quote: Tank, ¼-inch and heavier, at 2.10c. for narrow sizes and 2.25c. for wide sizes. We quote Shell at 2.35c. to 2.40c.; Flange, 2.40c. to

2.50c.; Marine, 2.50c. to 2.60c.; Fire Box, 2.75c. to 3.25c., depending on quality.

Bars.—We are advised that buyers are placing orders more freely, being convinced that prices are not going to be lower, in the near future at least. The recent arrangement entered into by the leading mills is, we are advised, working very satisfactorily. Delivered prices are now being arranged to nearly all points of any consequence in the United States. We quote Steel Bars at 2.25c., Pittsburgh, with freight to outside points added. The price f.o.b. Cleveland is 2.35c. There is only a fair demand for Iron Bars, but prices are strong at 2.15c., Valley mill, in carload lots. We quote Hoops and Bands at 2.55c. in carload lots and 2.70c. in small lots, all f.o.b. Pittsburgh; terms 30 days net cash.

Merchant Steel.—The market is quiet and little buying is being done, except in small lots. The tone of the market is weak. We quote: Soft Machinery Steel, 2.40c. to 2.50c.; Tire, 2.50c. to 2.60c.; Toe Calk, 2.75c. to 3c.; Open Hearth Spring, 3.25c. to 3.50c.; Sleigh Shoe, 2.50c. to 2.75c.; Cutter Shoes, tapered and bent, 3.75c.; Rolled Lay Steel, 3.75c.; Hammered Lay Steel, 4.25c. to 4.50c.; Plow Slabs, 2.75c. to 3.; Pick, Cant Hook and Wedge Steel, Open Hearth, 4c.; Crucible, 5c.; Tool Steel, 7c. and upward; freight allowance not to exceed 25c.; terms, except Tool Steel, 30 days net cash.

Skelp.—Prices on Skelp seem to be stronger than they were a couple of weeks ago and Grooved Iron has sold at 2c., Pittsburgh. We quote Grooved Iron and Steel Skelp at 1.97½c. to 2c.; Sheared Iron and Steel, 2.25c. to 2.35c., f.o.b. Pittsburgh; Boiler Tube Skelp is quoted at 2.10c. to 2.25c.

Pipes and Tubes.—We are advised that there are inquiries in the market for several round lots of Line Pipe that will require a heavy tonnage if they are put through. The manufacturers of Pipe, Boiler Tubes, Casing, &c., have adopted a new list, which is being distributed to their customers throughout the United States. In future all such goods will be sold at prices varying according to geographical location, prices being based upon Pittsburgh and advancing gradually away from Pittsburgh. Quotations to jobbers in carload lots f.o.b. Pittsburgh are as follows: Black Merchant Pipe, ½, ¾ and 1 inch, 25, 10, 5 and 2½ per cent.; ½-inch, 25, 10, 5 and 2½ per cent.; ¾-inch, 30, 10, 10, 10, 5 and 2½ per cent.; 1 to 4 inch, inclusive, 30, 10, 10, 10, 10 and 10 per cent.; 4½ to 12 inch, inclusive, 30, 10, 10, 10 and 10 per cent.; Galvanized 15 points less discount in the base; if Black base is 30 per cent. Galvanized base will be 15 per cent. On Screw and Socket Casing the new discounts are as follows: 2-inch 20, 5 and 3½ per cent.; 2¼ to 2¾ inch, inclusive, 20, 10, 10 and 4 per cent.; 3 to 4½ inch, inclusive, and 8¼ to 12½ inch, inclusive, 30, 10, 10 and 4 per cent.; 4¾ to 7¼ inch, inclusive, 30, 10, 10 and 6½ per cent.; 7½-inch, 30, 10, 10, 10 and 1 per cent.; Inserted Joint 10 per cent. higher than Screw and Socket. On Iron Boiler Tubes the discounts are as follows: 1 to 1½ inch, inclusive, 20, 5 and 1 per cent.; 1¾ to 2¼ inch, inclusive, 20, 10 and 2½ per cent.; 2½ to 8 inch, inclusive, 30, 10, 10 and 1½ per cent.; 2½ and 9 to 13 inch, inclusive, 30, 10 and 4½ per cent.; Steel Boiler Tubes about 5 per cent. net less than Iron.

Iron and Steel Scrap.—The Scrap market is very dull and prices seem somewhat demoralized. Consumers of Scrap are holding off from buying, waiting for still lower prices. We quote: No. 1 Railroad Wrought Scrap, \$22.25 to \$22.50, net ton; Cast Iron Borings, \$11.75 to \$12, net ton; Cast Iron Turnings, \$12.75 to \$13, net ton; Old Iron Rails, \$25.50 to \$26, gross ton; Old Steel Rails, short pieces, \$22, gross ton; long lengths, \$21.50, gross ton; Country Mixed Steel, \$16.50, gross ton; Heavy Melting Stock, \$21, gross ton; Low Phosphorus Melting Stock, Phosphorus guaranteed 0.035 or under, \$26, all f.o.b. Pittsburgh. On large tonnage it is not unlikely the above prices might be shaded.

Connellsville Coke.—The suit entered by the minority stockholders in the H. C. Frick Coke Company to annul a Coke contract made in January, 1900, between the H. C. Frick Coke Company and the Carnegie Steel Company at \$1.35 a ton is attracting much interest. Last week there were 19,633 ovens in the Connellsville region active and only 441 idle, the output being 217,518 tons. The Standard Connellsville Coke Company added 66 new ovens, and the Mahoning plant of the Cambria Steel Company, containing eight ovens, was started up. W. J. Rainey now has in blast at the Mount Braddock plant 490 ovens, having completed and fired 100 of the 150 new bee hive ovens erected at that works. Prices on Foundry and Furnace Coke continue high and Coke is very scarce. Furnace Coke is being quoted from \$3.25 to \$3.50 a ton, and Foundry Coke from \$3.75 to \$4.25 a ton. These prices are for emergency Coke, but we are advised that contracts for both Furnace and Foundry have been made at the above rates.

Cleveland.

CLEVELAND, February 27, 1900.

Iron Ore.—The past week has been about as devoid of developments in the sales market as could well be imagined. The cold weather of the past few days has seriously retarded, and at times almost suspended, shipments from docks to furnaces, which, save for slight interruptions of this character have been heavier than usual ever since the close of navigation. So active has this movement been that there is scarcely a doubt but that the docks will be far cleaner of Ore than ever before at the opening of navigation, even though this occur unusually early, a consummation to secure which the vesselmen are now bending every energy. The policy of the independent vessel owner who has tied his tonnage up on season contracts is, of course, to send out vessels early and maintain a lively movement in the hope of completing his contract in time to make several trips late in the autumn and thus secure the high "wild" rates which he believes will be likely to be paid on both Ore and grain cargoes toward the close of the season. Vessel property continues in good demand, and, despite the fact that vessels of all kinds at all suited to the Ore trade are held at fancy prices, a number of transfers have been made during the past week. Indeed, outright purchase or season charter for a lump sum seem to be about the only means open to the Ore shippers desirous of securing additional tonnage. The wooden steamers "Oceanica" and "Clyde," which were formerly owned by the Lehigh Valley, were purchased by Rogers, Brown & Co. for \$85,000. They will carry Ore to Buffalo and Tonawanda. The other half dozen vessels transferred went to independent vessel owners.

Pig Iron.—The price on Bessemer for third quarter delivery is still undecided upon. The Bessemer Furnacemen's Association held a meeting in this city last Saturday, but it was devoted to the consideration of matters relative to dock interests, &c. That the quotation for the third quarter will be made some time during March, and that it will be no lower than the present price now seems certain. It is now plain that the furnacemen underestimated the supply of Iron in the hands of the consumers of the Foundry grades. It has been the general opinion among the foundrymen that the buyers who have not provided for their requirements for the second quarter could not hold out beyond the close of the month, yet the buying, although showing some improvement over previous weeks, is far from active. On a conservative estimate it may be figured that just about 50 per cent. of the foundrymen have contracts covering their supply for the second quarter and some of the interests which do not need to concern themselves regarding the supply for the three months ending July 1 have this week placed inquiries for third quarter material. The market on all Foundry grades is firm at the quotations which have heretofore ruled, but there has been a slight shading of prices in some cases where immediate delivery was required. This is due, of course, to the fact that a number of the furnaces which were reopened in November and December came into the market too late to have their order books well filled, and consequently find themselves with some Iron on hand with which spot delivery must be made. A similar circumstance would seem to have induced the action of a firm operating two recently reopened furnaces in Pennsylvania, and which is said to have come into this market during the week with an offer to supply Gray Forge under the ruling quotation of \$21.50. Lake Superior Charcoal continues at the same nominal quotation. The addition of the new Youngstown furnaces to the producers is not expected to have the effect that it otherwise would owing to the fact that many furnaces in this territory have to bank at frequent intervals for two or three days owing to the scarcity of Coke. Apparently it will be midsummer before any real increase in production will have to be figured on. Even then it is doubtful if the aggregate production will be any in excess of requirements.

Finished Material.—The movement continues exceptionally heavy for this season of the year. A characteristic feature of the market at the present time is the conservatism displayed. Whereas last year an inquiry for 100 tons of material was likely to be followed by an order for 125 tons, this year an inquiry for 200 tons, will, in most cases, bring an order for, say, 150 tons. There are also other evidences that the buyers believe that prices will be lower. In this connection present conditions clearly attest the fact that the formation of the large combinations among manufacturers has aided materially in the maintenance of prices. The Plate market is as weak as ever, and possibly weaker. The Sheet market presents a peculiar contrast. In the case of the heavier gauges, which are almost Plates, there has been a slight shading of prices in a number

of cases where mills were especially desirous of securing business. On the other hand the consolidation recently effected by the mills has materially strengthened prices at the other end of the list. Quotations on Iron and Steel Bars continue unchanged. The Structural market in so far as it concerns new building operations is a trifle inactive, although inquiry continues good. Many sales agents in Finished Material lines will revise their prices from stock on March 1.

Old Material.—The Scrap market following as it does the Pig Iron market continues in a waiting condition, although a fair volume of business was reported last week. Prices, with the exception of occasional slight fluctuations, continue as last quoted.

St. Louis.

Office of *The Iron Age*, 1205 Chemical Building, {
ST. LOUIS, February 27, 1900. }

Pig Iron.—Really nothing to cause comment. Quietness still in evidence, but furnace representatives say they would not know what to do with requests for large tonnage specifications unless deliveries were remote. Said to be no free Iron of consequence. Carload and small quick shipment wants for special Irons, principally to fill out for mixtures, are constantly being presented. With a full understanding of the difficulties of Ore and fuel supply and their fixed charges furnaces anticipate no marked, if any, reductions in present prices. Consumers, however, seem willing to await development on this point, or at least defer purchases until wants are pressing. In the meantime no lessening of activity is apparent at foundries, but, on the contrary, hurry up on valid contracts continue to press the shipping end of furnaces. We quote on cars St. Louis:

Southern, No. 1 Foundry.....	\$22.25 to \$22.50
Southern, No. 2 Foundry.....	21.25 to 21.50
Southern, No. 3 Foundry.....	20.25 to 20.50
No. 1 Soft.....	22.25 to 22.50
No. 2 Soft.....	21.25 to 21.50
Gray Forge.....	20.00 to 20.25

Bars.—No change of any kind to be noted except it may be mentioned that jobbers have presented some carload specifications this week on prior contracts. This shows a necessity for filling in on the part of trade factors who have been heretofore well stocked. Small orders continue to come in, and demand in this branch is for quick action on shipments, and denotes necessity for immediate use. Mill quotations on Iron remain at 2.35c., base, half extras, East St. Louis, in carload lots. No change has taken place in jobbers' prices, which are 2.75c. to 2.90c., base, full extras, as to quantities and assortment. Steel Bars are now definitely quoted by mills at 2.40c., base, half extras, in carload lots, East St. Louis. Jobbers' price is 3c., full extras.

Rails and Track Supplies.—Being a little between seasons new contracts are not greatly in evidence, and a slight shading is noted in Track Bolts. Spike mills are well supplied with orders, and no concessions mentioned. We quote Splice Bars, Steel, 2.55c.; Iron, 2.55c.; Track Bolts, with Square Nuts, 3.00c.; with Hexagon Nuts, 3.80c.; Spikes, 2.75c.; Steel Links and Pins, 3.20c.

Pig Lead.—Is reported quiet, and while not weak is not actively strong. Chemical is bid for at 4.60c., but refiners' views somewhat higher. As spring approaches the demand for this particular grade is expected to visibly increase. Soft Missouri is quoted at 4.57½c. Lead Ore sold at unchanged price of \$27.50 per 1000 lbs.

Spelter.—An exceedingly quiet market prevails, and local quotations vary greatly. Smelters say they would be glad to sell at 4.50c. to 4.55c., with leaning toward the lesser price for good round tonnage. Export bidding is on basis of 4.40c. on declining London market. Zinc Ore was unchanged as to top price—namely, \$34.50 per ton.

Cincinnati. (By Telegraph.)

Office of *The Iron Age*, Fifth and Main streets, {
CINCINNATI, February 28, 1900. }

Transactions in Pig Iron throughout the past week were more to the liking of sellers than they have been for the past several weeks. The volume of trading was not large, though in that respect it showed a big improvement. There were quite a sprinkle of sales as large as 1000 and 1500 ton lots, and trade in a retail way was quite fair. Still it cannot be said that even this improvement indicates any immediate and general movement among buyers. Nearly all the demand is coming from the general foundries. In spite of the fact there are some sellers who are willing to make concessions to induce buying. The market is strong, and in the main unyielding. In a retail way the basis is

about \$17.50, Birmingham, for No. 2, with \$17.25 for larger lots, and as low as \$17 for a few offerings which are in the main regarded as irregular. The fact that many furnaces are refusing to consider anything less than the maximum figures, taken with the small concessions offered even in the face of the continued dullness, is evidence of the inherent strength of the situation. Consumers, too, are as urgent for deliveries as they have been at any time in the past months. This also is very cheering to those who stand on the bull side. Coke is strong and comparatively scarce. We quote, f.o.b. Cincinnati:

Southern Coke, No. 1.....	\$21.50 to \$21.75
Southern Coke, No. 2.....	20.50 to 20.75
Southern Coke, No. 3.....	19.50 to 19.75
Southern Coke, No. 4.....	18.75 to 19.25
Southern Coke, No. 1 Soft.....	21.50 to 21.75
Southern Coke, No. 2 Soft.....	20.50 to 20.75
Southern Coke, Gray Forge.....	18.75 to 19.25
Southern Coke, Mottled.....	18.75 to 19.25
Ohio Silvery, No. 1.....	..... to 30.00
Ohio Silvery, No. 2.....	..... to 29.00
Lake Superior Coke, No. 1.....	22.75 to 23.75
Lake Superior Coke, No. 2.....	21.75 to 22.75

Car Wheel and Malleable Irons.

Standard Southern Car Wheel, Chilling Grades.....	\$25.75 to \$26.25
Standard Southern Car Wheel, No. 2.....	24.75 to 25.25
Lake Superior Car Wheel and Malleable.....	25.50 to 26.50

Plates and Bars.—The market has been fairly active and steady with a slight advance in Bar Iron quotations and lower figures on No. 10 Sheets. We quote, f.o.b. Cincinnati: Iron Bars, carload lots, 2.28c., with half extras; small lots, 2.60c., with full extras; Bar Steel, in car lots, 2.50c., with half extras; small lots, 2.95c., with full extras; Iron Bar Angles, 1½ x 3-16 inch and larger, in car lots, 2.55c.; small lots, 2.80c.; Sheets, No. 10, 2.80c.; No. 27, Stove Pipe, 3.25c.; No. 27, Steel, 3.35c.; Plates, 2.75c. to 3c.

Old Material.—The market has been rather quiet with a shade of weakness, though with the exception of Iron Rails the quotations are unchanged. We quote, f.o.b. Cincinnati: No. 1 Wrought Railroad Scrap, \$20 to \$21 per net ton; Cast Scrap, \$12 to \$13 per gross ton; Axles, \$25 per net ton; Iron Rails, \$22 to \$23 per gross ton; Car Wheels, \$22 to \$22.50 per gross ton.

Philadelphia.

Office of The Iron Age, Forrest Building, }
PHILADELPHIA, Pa., February 27, 1900. {
(By Telegraph.)

There does not appear to be much change in the situation to-day, except that there is a little more disposition to buy. Buyers' yards are bare of stocks and sales are nearly all for quick shipment, so that it is evident that the demand cannot fall off very much, the chances being rather in the other direction. This is not manifested as yet by any distinct stiffening in prices, although it is evident that in Pig Iron, Old Material and Sheets holders are inclined to be firm at full quoted rates. It would not require much increase in the demand to change the tone of the market, and it is thought that this is one of the probabilities of the near future.

(By Mail.)

The outcome of the business during the second month of the year has not been very satisfactory, and especially if comparison is made with almost any similar period during 1899. So far, however, the change is more of a negative than a positive character, except as regards the placing of new business, which is distinctly conservative. Prices have been fairly maintained, but the tendency all the way through is toward lower figures. The declines have not been very important so far, but they have been constant; and after six or eight weeks of reaction, with no indications of an early recovery, they begin to attract attention, especially as prices in some lines are getting very close to first cost. There is no doubt that the situation is beset with more than ordinary difficulties, and until the outlook clears the trade find it difficult to determine just where they stand. There are very few but would accept a liberal amount of business at something near to-day's ruling prices, but orders are mostly limited in size, as well as for dates for delivery, consequently the amount of new business entered (or obtainable) is not important. There is a large consumption of Iron and Steel, probably as large as there was at any time last year, but production is making such rapid strides that consumers no longer entertain fears of a shortage. The change therefore is not because there is less demand, but because there are larger supplies; and with larger supplies there

is a corresponding indifference in regard to contracting for forward deliveries, all of which makes an easier market. The prospect for a continued heavy demand, however, is not less favorable than it was a year ago, but with so much material to be delivered on old contracts, and an entire absence of speculative feeling, new buying is very tame, compared with what it was last year at this time.

Pig Iron.—It is difficult to define the situation in Pig Iron. Everybody knows that the market is dull, most people know that prices are easier, but how long the dullness will continue, and whether prices will be still lower, nobody seems able to give even a fairly approximate guess. Such being the case it is particularly difficult in an article like this to offer even a suggestion with any degree of confidence. The market has a very uneven appearance, however, some getting full outside rates, more are disposed to accept inside figures rather than miss a sale, while a few others go still lower to be sure of getting in at some price. The supply is not excessive, but it is clear that furnaces can make prompt deliveries when required; and most concerns are disposed to encourage business either for long or short delivery, providing reasonably fair prices can be had. Some special lots in blocks of 5000 and 10,000 tons each were taken last week, but they do not seem to have set the pace for anybody else; and at this writing the feeling is one of absolute indifference. Consumers appear to be reasonably well satisfied with contracts which are in process of completion, and until they need Iron or see some movement which indicates a turn in the market, it will be hard to wake them up. Prices are too erratic to be quoted in detail, but the range taking in the highest and lowest would be about as follows for seaboard or nearby deliveries, and 25c. to 50c. less for deliveries within a radius of 100 miles South or West: No. 1 X Foundry, \$24 to \$25; No. 2 X Foundry, \$22.50 to \$23.50; No. 2 Plain, \$21.75 to \$22.25; Standard Mill Iron, \$20 to \$20.50; Basic, \$22 to \$22.50; Bessemer, nominal, \$22.50 to \$23; Low Phosphorus, \$27 to \$28, and Charcoal Iron, \$27 to \$29.

Billets.—There is but little doing, prices being very unsatisfactory to buyers. Sales have been made at \$35, and, although quotations are nominally \$36 to \$36.50, no business of any account can be done at over \$35.

Plates.—Prices in this department are extremely disappointing, but competition is becoming closer as the season advances. There are some new candidates for business, and some of the older concerns have broadened out until their capacity is almost double what it was a year ago, so that to give a share to each requires an immense tonnage. Of course, owners make great efforts to keep their mills full of work, and while the tonnage is very large, it is not sufficient to keep every mill running to full capacity. This leads to cutting in prices, but with the high cost of primary materials there is little or nothing left to cut from unless it is to go below first cost. The immediate outlook in this line is not encouraging; and although prices ought to do better the chances for the time being are somewhat dubious. For seaboard or equivalent points prices are about as follows: Steel Plates, ¼-inch and thicker, 2.10c. to 2.15c.; Shell, 2.25c. to 2.30c.; Flange, 2.50c. to 2.60c.; Fire Box, 3c. to 3.10c.; Charcoal Iron Plates, C. H. No. 1, 3c.; Best Flange, 3.50c.; Fire Box, 4c.

Structural Material. The demand for Structural Material is exceptionally large for the season, and prospects for the spring and summer months are excellent. Inquiries are numerous, both for bridge and structural work, and it appears to be an absolute certainty that mills will have all the work they can handle for months to come. Prices are as follows: Beams and Channels, 15 inches and under, 2.40c.; Angles, 3 to 6 inches, 2.40c.; Zee Bars, 2.40c., f.o.b. Philadelphia; Angle Bulbs and Deck Beams, 2.68c.; Tees, 2.45c.

Bars.—The Bar situation is quite strong, there being a very heavy demand, and at fairly steady prices. A meeting of the Eastern Bar Iron Manufacturers' Association was held here last Friday, at which prices were reaffirmed at 2.2c. at mill for Best Refined Iron. Difficulties have been met with in regard to delivered prices, however, and it is believed that some arrangement is under consideration by which delivered prices will be quoted instead of mill prices. The present arrangement is obviously somewhat embarrassing, and it will be mutually beneficial if some other plan can be agreed upon. Prices are about as follows for Philadelphia or nearby deliveries: Ordinary Iron, 2.07½c. to 2.10c.; Refined Iron, 2.20c.; Test Iron, 2.30c.; Steel Bars, 2.50c. to 2.60c.

Sheets.—There is a better feeling in Sheets, and prices are stronger. Inquiries are in for large lots, and at the low figures recently ruling there would be no difficulty in securing a good line of business. Last week's

quotations are continued for best Sheets—viz. (Common Sheets two-tenths less): No. 10, 2.70c. to 2.80c.; No. 14, 2.95c.; No. 16, 3c.; Nos. 18-20, 3.05c.; Nos. 21-24, 3.15c.; Nos. 26, 27, 3.25c.; No. 28, 3.35c. to 3.45c.

Old Material.—The demand is a little better, but there is no change in prices, although in instances in which material was wanted higher prices were paid, but as a rule bids and offers for deliveries in buyers' yards are about as follows: Choice Railroad Scrap, \$23 to \$25; No. 1 Yard Scrap, \$19 to \$20; No. 2 Light Scrap, \$13 to \$14; Machinery Cast, \$17 to \$18; Heavy Steel Scrap, \$20 to \$21.50; Old Iron Rails, \$26 to \$28; Old Steel Rails, \$22 to \$23; Wrought Turnings, \$15 to \$15.50; Cast Borings, \$13.50 to \$14; Old Car Wheels, \$22 to \$23; Iron Axles, \$26 to \$28; Steel Axles, \$27 to \$29.

New York

Office of *The Iron Age*, 232-238 William street,
New York, February 28, 1900.

Pig Iron.—So far as new business is concerned, the local market has been very quiet. There have been a number of inquiries, but some of them are apparently merely to test the market. In some quarters there is some accumulation of off grades and the lower grades. Advices from the Continent report sales of some round lots of No. 2 Foundry at prices delivered there which at current rates of freight leave about \$16 at furnace, Birmingham. It is, of course, possible that better freights have been secured, which make the furnace price higher. There is some demand for export for Basic Iron. Prices are as follows: Lehigh and Schuylkill Irons, No. 1 Foundry, \$23.50 to \$25; No. 2 X, \$22.50 to \$22.75; No. 2 Plain, \$21.50 to \$22, and Gray Forge, \$18.50 to \$19.25. Southern brands are quoted: No. 1 Foundry, \$22.75 to \$23; No. 2 Foundry, \$21.50 to \$22; No. 1 Soft, \$22.25 to \$22.75; No. 2 Soft, \$21.25 to \$21.75; No. 3 Foundry, \$21.25 to \$21.75, and Gray Forge, \$19.25 to \$20.25.

Cast Iron Pipe.—Active competition continues in this district between the consolidation and the outside shops, so that low prices are made, considering the current price of pig iron. While irregular, the market is far from being active, the tonnage being small. Practically nothing but small lots are being bought. We quote \$28 to \$29 per gross ton for 8-inch Pipe, tidewater.

Steel Rails.—We do not hear of any sales of consequence so far as the Eastern mills are concerned. Quotations remain \$35, at mill, for Standard Sections. We quote Angle Bars, 2.25c. to 2.35c., and Spikes, 2.60c. to 2.75c.

Finished Iron and Steel.—The market for Structural Material remains in a very satisfactory state. During the week the contract was closed for a moderate sized lot for the Ellis Island Hospital, and bids have now been called for on the Manhattan power house, which involves about 5000 tons. So far as we can learn negotiations are still under way for the material for the rapid transit tunnel. The Plate market continues weak. We quote: Beams, 2.40c. to 2.50c.; Angles, 2.40c. to 2.45c.; Universal Mill Plates, 2.65c. to 2.75c.; Tees, 2.40c. to 2.45c.; Channels, 2.40c. to 2.50c.; Steel Plates are 2.20c. to 2.40c. for Tank, 2.30c. to 2.50c. for Shell, 2.50c. to 2.75c. for Flange, 3c. to 3.10c. for Fire Box, 3.50c. to 4c. for Locomotive Fire Box, on dock. Charcoal iron Plates are 3c. for C. H. No. 1, 3.50c. for Flange, and 4c. for Fire Box. Refined Bars are 2.20c. to 2.25c., and Common Bars are 2c. to 2.10c., on dock. Soft Steel Bars, 2.40c. to 2.45c.; Hoops, 2.70c. to 2.75c., base, delivered.

Metal Market.

Office of *The Iron Age*, 232-238 William street,
New York, February 28, 1900.

Pig Tin.—The market here is dull and entirely nominal, consumers buying only from hand to mouth, as all confidence has been taken from the article through the heavy discounts existing on future deliveries. This discount is not due to scarcity of stock, but is simply a result of the fact that spot stock is controlled by one interest, here as well as in London. Trading was very slight and small transactions made up the market. This market closed to-day with spot nominally quoted 32½c. March is nominally quoted 31½c., and April prices are in the neighborhood of 30½c. The closing London cable to-day quoted £144 for spot and £136 10s. for futures.

Copper.—There is very little business doing, as consumers are well supplied with the metal which they purchased at the recent large sales. The condition of the market remains unchanged. The prices quoted on 'Change remaining the same, with 16½c. for Lake and 16½c. for Electrolytic and Casting. Certain parties, however,

quote 16½c. for miscellaneous lots of Lake Superior Ingot. European business is said to have picked up slightly within the last few days. It is evident though that the large foreign consumers are pretty well supplied. The recent business was closed at prices above the parity of those of this country. It is said that merchants have realized about 1 per cent. over domestic prices on European business. The closing cables to-day from London name £75 for spot and £74 2s. 6d. for three months' futures. Best Selected is quoted £77, a decline of 5 shillings. The exports this month have been large, and will probably exceed the January exports, notwithstanding the fact that this is a short month.

Pig Lead.—There is absolutely no change in the position of the market here. Prices of the American Smelting & Refining Company remain unchanged, at 4.70c. to 4.75c. for spot and futures. It is said that there are signs of an increased production. London has declined a shade and is quoted at the close to-day £16 11s. 3d.

Spelter.—Is dull and weakish. The market is still rather unsettled. Prices quoted here by various interests vary between 4.55c. and 4.65c. We understand that very large quantities are being sold for export and, while the shipments have not as yet been made, transportation has been secured for a large amount of metal. The closing London cable to-day is 2 shillings and 6 pence lower than that of a week ago, naming £21 15s.

Nickel.—Is without change. A good demand continues and prices for wholesale lots remain unchanged at 38c. Retail lots are quoted as high as 45c.

Antimony.—While Hallett's has been reduced in London £1 to £39 the price here has not changed, and 9½c. continues to be quoted. Cookson's is unchanged at 10½c. to 11c.

Quicksilver.—Wholesale lots of 100 flasks and over are quoted \$51 per flask of 76½ lbs. The London market remains at £9 12s. 6d. for Rothschild's and £9 11s. 3d. for second hand.

Tin Plate.—An exceptionally good market continues. Business is active and prices remain firm and unchanged. The American Tin Plate Company quote on a basis of \$4.84 per box of Standard 100-lb. Cokes, f.o.b. New York, or \$4.65, f.o.b. mill.

The World's Spelter Production.—We are indebted to the American Metal Company, Limited, for the following statement, compiled by Henry R. Merton & Co., Limited, of the world's production of Spelter. The figures are given in gross tons:

	1899. Tons.	1898. Tons.	1897. Tons.	1896. Tons.
Rhine, Belgium and Holland....	189,955	188,815	184,455	179,730
Silesia.....	98,590	97,670	94,045	95,875
Great Britain.....	31,715	27,940	23,550	24,880
France and Spain.....	32,955	32,135	32,120	28,450
Austria.....	7,190	7,115	8,185	9,255
Poland.....	6,225	5,575	5,760	6,165
Totals	366,630	359,250	348,115	344,355
United States	115,855	102,395	88,207	78,106
Grand totals	482,485	461,645	436,322	417,460

Park Brother & Co., Limited.—The report of John W. Chalfant, Jr., auditor, in the matter of the liquidation of Park Brother & Co., Limited, at Pittsburgh, was filed in the courts in that city on Friday, February 23. Mr. Chalfant was appointed on December 20, 1899, to report a schedule for the distribution of the balance in the hands of the trustees to the parties entitled to it. The corporation was organized under the act of 1874, and had a capital of \$4,000,000, the stock being held as follows: William G. Park, \$719,500; David E. Park, \$390,000; James H. Park, \$353,000; Richard G. Park, \$311,500; Charles C. Park, \$122,000; Sarah G. Park, \$417,000; Eleanor G. Park, \$130,500; Margaret B. Park Kelly, \$128,500; Richard G. Gray, trustee, \$788,000; DeWitt C. Clapp, \$143,000; John M. Kennedy, \$312,000; Charles E. Clapp, \$50,000; George H. Clapp, \$11,000; Gilbert M. Black, \$20,000; Park E. Bell, \$14,000; William G. Park, trustee, \$90,000. On May 4, 1899, the stockholders decided to dissolve the corporation. D. E. Park, D. C. Clapp and C. E. Clapp were appointed liquidating trustees to wind up the affairs of the company. Since November 4, 1899, the liquidating trustees have received a total of \$16,320.94, not previously charged against them, which, added to the balance reported in their account, makes a total of \$740,276.66 charged against them. They have paid out to various stockholders a total of \$169,678.59, leaving \$568,311.76 for pro rata distribution among those entitled to share in the fund.

The Chicago and Northwest Machinery Market

Office of *The Iron Age*, 805 Fisher Building, {
CHICAGO, February 24, 1900. }

Chicago business in the machinery line has been quite satisfactory during the month of February. In the lines dependent upon the active prosecution of outdoor work the severity of the weather has caused some falling off in the demand, but the great branches of productive industry have been so active that a stream of orders has continued to pour into establishments making or selling the classes of machinery or supplies which they require. Even when some slackening of inquiries is observed, a larger proportion of those coming in seems to be from parties who have fully decided to buy and a less number from those who merely wish prices to assist in making estimates for the cost of new plants. The belief prevails quite generally that this year's business is destined to be larger than that of last year, although in some quarters misgivings are expressed as to the effect of the Presidential campaign. The outlook is particularly flattering for manufacturers of mining machinery, indications now being observed of a general disposition to make improvements and thereby increase output or lessen expense. Fewer complaints are heard of the unfavorable effect of high prices on the machinery trade. Some manufacturers express the opinion that business would be benefited considerably if iron and steel should decline moderately, but ordinarily this topic is not one of leading interest. The higher level of values now ruling seems to be gracefully accepted as one of the new conditions of business. It is somewhat surprising to note how well the export trade keeps up among the manufacturers of this section, although so far from the seaboard. Confidential statements have been received from a number of establishments which are of a most gratifying character in this respect.

A disturbing feature at this particular time is the development of labor troubles among the machinists in various shops in Chicago. The hope is entertained that this difficulty may not be so serious as feared in some quarters, and that an adjustment of a satisfactory character may be accomplished shortly. If this should not be the case, considerable work will undoubtedly be shifted from the city shops to those of the surrounding territory, although some cannot thus be shifted, but will have to await a settlement of the trouble. Information is given elsewhere in this issue of the manner in which the employers have taken hold of the difficulty.

An excellent trade in machine tools and machinists' and mill supplies is reported by Chicago supply houses. The volume of business in February was fully up to that of January. The features of the trade have been about the same, orders for tools not being large but numerous, and coming mainly from old established concerns that are steadily increasing or improving their equipment.

The Dodge Mfg. Company, Mishawaka, Ind., have not as yet discovered any tendency to dullness in the iron trade as it applies to their business in power transmitting machinery. They are having a great many more inquiries now than last year at this time, and are further behind with their orders. Business has been quite satisfactory, and the fact that there is no bickering about prices leads them to believe that trade is pretty well established in their line for this year. If only a moderate percentage of the manufacturing ventures and improvements that are now projected should be consummated during the year they will have a great deal more business available than ever before. The company's line puts them in touch with nearly every line of manufacture, and they state they do not know of any industry which is not being pushed to the fullest extent. The export trade of this company is fully as large as ever before, although they are making no effort whatever for it, as they are hardly able to look after their domestic trade. Unless something unforeseen occurs to disturb business matters, particularly referring to labor troubles, they see no reason why the entire year should not be a most excellent one in every respect. They express the opinion that it would require only a very moderate decline in the standard iron and steel commodities to stimulate a very much larger demand, as undoubt-

edly a large amount of work is being held back on account of high prices, and if a moderate decline can be brought about without creating a feeling of fear that prices may go still lower, it would be of very material benefit to the trade. Any marked decline now would only create fear that prices would go still lower, and all buying would practically be stopped, excepting in such lines as are completely sold up and the supply is very short.

The Chicago Pneumatic Tool Company, Chicago, say that so far as their trade is concerned they see no tendency to dullness. Orders for the month of February double those of the corresponding month of 1899 and are larger than last month. The greater part of their trade is in American shops, including railroads and shipyards, and they have a large and constantly increasing foreign demand for their tools. They are shipping a considerable number of tools to Japan, Mexico and throughout Europe generally. The only place where they have formerly supplied them which is now showing a falling off is in South Africa, which, of course, is attributable to the war conditions prevailing there. Officials of the Russian Government have recently had a conference in Philadelphia with J. W. Duntley, president of this company, and are now closing a contract for 1000 pneumatic tools, amounting to about \$300,000. Conclusive evidence of the value of pneumatic appliances over hand labor was shown the Russian representatives in the Cramp shipyards, in which 300 pneumatic drills, hammers, riveters, rammers, hoists, &c., are in service. The Government order is intended for the equipment of the Russian navy yards and will cover generally the Boyer long stroke hammers, deck and shell riveters, Boyer drills and a number of special types.

The Fox Machine Company, Grand Rapids, Mich., report no material change in the machinery business either in machine tools or trimmers, which is a pretty good index of general manufacture. There seems to be a good demand for their products. Foreign trade has been somewhat disturbed by the war in South Africa, but they express the hope this will soon be over. The typewriter business is on the increase, both foreign and domestic trade doubling up very rapidly.

The Adams Company, Dubuque, Iowa, report that they are pushed to fill orders for their Farwell molding machines and Farwell milling machines combined with iron planer, and that in one week they received four orders from Europe. The foreign trade on this article is very satisfactory. Most foreign orders are duplicates, indicating satisfaction with the goods first purchased. All the departments of their factory are running to full capacity, and on most articles they are sold many months ahead, and expect the demand for 1900 to equal that of 1899.

Sibley & Ware, South Bend, Ind., state that their business has been very good during the month of February, and, compared with February of 1899, their orders have been decidedly satisfactory.

Rudolph & Krummel, Chicago, have not experienced any tendency toward dullness in their line of business. On the contrary, orders are received more freely than ever before. Considering that domestic orders are preferable to foreign ones, and not being in position at present to cultivate both, they have been obliged to abandon the foreign field almost entirely, with the exception of a few special tools. They consider the outlook for 1900 very bright, unless labor troubles should interfere.

Stover Mfg. Company, Freeport, Ill., report a slowing up of orders, no doubt due in part to advanced prices, but in a large measure to this being an "off season" for the sale of wind mills. In their hardware department business has been more than up to the usual standing for this season of the year. They say it is hard to determine at this time just what the business will be on wind mills, although indications are quite favorable, notwithstanding the advance in price.

Perry Ransom, Oshkosh, Wis., says he has had some foreign trade and the trade at home has been as heavy as at any month during the past year, and he is looking forward to a good spring business. One thing that gives confidence in the future is that European trade can be counted on for some time to come. A great many good inquiries are on hand at the present time.

The Bucyrus Company, South Milwaukee, Wis., report no diminution in orders for machinery in their line. Their works are crowded to their utmost capacity and orders are coming in rapidly. They are just shipping one large placer mining outfit to Siberia and another one to the United States of Colombia. So far as they can tell at present the volume of business done by this company this year will exceed that of last year.

G'sholt Machine Company, Madison, Wis., say the indications are that February business, both as regards orders and shipments, will be the largest since the company started in business. Their foreign trade has been increasing continually and they are shipping several loads each month to European concerns.

Nordberg Mfg. Company, Milwaukee, Wis., say that

so far as they are able to judge there is no dullness nor any promise of dullness in the machinery trade. Quite the contrary is the fact with them. They are under the disagreeable necessity of declining orders from old customers aggregating over \$100,000, simply because they cannot set even a remote date for finishing such orders. Had they four times their present capacity they could book orders within two weeks sufficient to keep their enlarged works running for a year, and not have a salesman out.

Industrial Works, Bay City, Mich., say there is no let up to the demand for the machinery which they manufacture. While their customers are very largely railroads, still in certain lines they manufacture a class of machinery extensively used by iron and steel plants of most kinds, and from these they are receiving not only a large amount of inquiry but a great many orders. Their business is keeping up so far just as well this year as it did last, and they say they can see no reason why the demand will not continue at least through the present year.

Manistee Iron Works, Manistee, Mich., report the demand for machinery as being as good as ever. They are running day and night to full capacity at least in so far as they can get men. They find some difficulty in getting boiler makers and molders. They have recently begun selling Manistee steam pumps for export to China, India and the Philippines, and within 60 days have consigned over \$1000 worth of pumps to these points. They are now building for the Theo. Hamm Brewing Company of St. Paul, Minn., a compound duplex pump of 1,100,000 gallons capacity, with 11½-inch by 20-inch steam cylinders and 12¼-inch water cylinders, 18-inch stroke, the water end being of their special pipe design; are also building a 14 x 14 x 18 duplex pump for the South Omaha plant of Armour & Co., and are just shipping a 10-foot vacuum pan to Ohio for making salt.

The American Hoist & Derrick Company, St. Paul, Minn., say that February is usually the duller month of the year with them, but that the present February has developed orders at least 33 1-3 per cent. in advance of any previous February. Inquiries and prospective work have never been so active and there is nothing in sight to cause a reaction in trade. The demand for export has been steadily increasing. February shipments are especially satisfactory in that direction.

Union Steam Pump Company, Battle Creek, Mich., state the tendency in their line is toward dullness for manufactured products, more especially the foreign demand. This dullness on the part of trade is occasioned by reason of higher prices in raw material, and, consequently, in the manufactured product. There is also another reason for this tendency and that is the change in railroad classifications in certain lines which make rates almost prohibitory. It looks very much as though the railroads desire to take too great advantage of the apparent rush of business to "make hay while the sun shines." They stated some months since that the effort on the part of people to advance prices to the extent that they were doing would act adversely on the manufacturer later on, and this is now coming to pass. There appears to be a great effort in certain directions to unload surplus product. Their opinion is that the country has gone a little too fast and that it will be only a short time when lower prices in all lines will be the rule and not the exception.

The American Steam Pump Company, Battle Creek, Mich., did 100 per cent. more business in January this year than in 1899, and will show a fair increase during February. Their export trade keeps up and they are now exporting about 50 per cent. of their product. So long as the export business continues to grow they do not see any immediate prospect of a reaction in business, although they believe that prices of some commodities, notably pig iron, have reached the top and a large over-production will be shown before July 1, 1900.

Hoefler Mfg. Company, successors to the Stover Novelty Works, Freeport, Ill., state that the demand for drill presses, special wire working machinery, bicycle machinery, power hack saws and wire straighteners keeps up as usual.

H. W. Caldwell & Son Company, Chicago, say that trade during February has been satisfactory, although it is the rule in their line of business for trade to fall off during January and February. It seems to them that the prospects for a busy summer are indicated in the rather active condition of trade during the dull months.

The Edward P. Allis Company, Milwaukee, Wis., have noticed no lessening in the demand for engines, either for electric service or for rolling mill and blast furnace purposes. The orders obtainable are still only limited to their output and ability to deliver within a reasonable time. They could book three times the business that they are now taking in, were it possible to get the work out. During February the National Steel Company ordered two blowing engines for their Franklin Furnace at

Columbus, Ohio, and the Iroquois Iron Company ordered two blowing engines for their furnace at South Chicago. The Toledo Traction Company have ordered another vertical cross compound engine of 2000 horse-power. About the usual number of orders of less importance have come to hand.

Joseph T. Ryerson & Son, Chicago, state the demand for boiler makers' tools and machinery seems unusually large at the present time, prompted probably by the present business and expected demand. They report large sales on their Lennox rotary bevel and splitting shears, having sent these tools during the past month to the following points: Anaconda, Mont., Galesburg, Ill., Kewanee, Ill., Kansas City, Mo., Chattanooga, Tenn., Joliet, Ill., Detroit, Mich., Fort Wayne, Ind., &c.

Chas. H. Besly & Co., Chicago, who are both merchants and manufacturers, report that the demand during February kept squarely up to the standard set in January, which was the best January they had known in many years. All departments of their business are crowded to the utmost, whether in store or factory.

The Vilter Mfg. Company, Milwaukee, Wis., have received contracts for quite a little new work for future delivery, which will keep them busy for several months and will necessitate their continuing to operate their works day and night. The larger orders lately obtained are for medium sized refrigerating plants and large sized Corliss engines.

The business of the Whiting Foundry Equipment Company, Harvey, Ill., has kept up in a very satisfactory manner, although orders are not so plentiful as a few months ago. They have an immense mass of inquiries to figure on, but only a comparatively small per cent. of them result in orders. They find this experience to prevail with most manufacturers in similar lines. They have received some export orders and numerous foreign inquiries.

The Otto Gas Engine Works, Chicago, are still very busy, but it is on orders secured last year. February orders have been decidedly light, which they attribute partly to increased cost, owing to the advance in all metals, and partly to the winter weather, which would naturally affect their trade.

Pawling & Harnischfeger, Milwaukee, Wis., find their trade continuing to hold up with the average of the past year, and they can see no appreciable slackening of the demand. Among orders for electric traveling cranes recently booked are one 50-ton and two 10-ton for the Latrobe Steel & Coupler Company; one 20-ton, A. L. Ide & Sons, Springfield, Ill.; one 10-ton, J. G. Wagner Company, Milwaukee; three 5-ton, Milliken Bros., Brooklyn; one 30-ton and one 10-ton, Richmond Locomotive Works, Richmond, Va.; one 30-ton and three 10-ton, Peru Steel Castings Company, Peru, Ind.; one 30-ton, Edward P. Allis Company; one 20-ton, Gates Iron Works, Chicago; one 10-ton, American Tin Plate Company; one 25-ton, Union Traction Company, Anderson, Ind.; one 25-ton and two 5-ton, Lorain Steel Company, Lorain, Ohio; one 15-ton, East Jersey Pipe Company, Paterson, N. J.; two 20-ton, Thos. Carlin Sons Company, Pittsburgh; together with a corresponding proportion of electric hoists, head travelers, &c. They are doing some export business, but at present have very few foreign orders on their books.

The American Machinery Company, Grand Rapids, Mich., have just shipped their exhibit to the Paris Exposition. They will be represented in the Palace of Machinery and Electricity at Champ de Mars, as well as at the United States Machinery Annex at Vincennes. Their exhibit at Paris will consist entirely of Oliver wood trimmers, their other manufactures being crowded out on account of insufficient space to exhibit properly. They will be represented by photographs.

The Lake Erie Iron Company.—In enumerating the properties controlled by the Republic Iron & Steel Company in the consolidation supplement issued last week the Lake Erie Iron Company were named. It was accompanied by the bracketed statement "rolling mill." The idea was to convey the fact that the Republic Company owned only the rolling mill. This was not sufficiently explicit. The Lake Erie Iron Company sold only the rolling mill which they had on Whiskey Island. They did not sell or transfer their corporate rights, nor their large bolt and nut works, nor other mills and properties in which the Lake Erie Iron Company are interested.

J. Wesley Pullman of Philadelphia, Pa., states that over 100,000 tons of Helen ore has been sold to furnaces in this country. The ore is owned by the Consolidated Lake Superior Company, near Michipicoten, Canada.

The National Association of Credit Men has decided to establish a national bureau for the investigation and prosecution of fraudulent failures.

The Cincinnati Machinery Market.

Office of *The Iron Age*, Pickering Building, }
CINCINNATI, OHIO, February 24, 1900. }

The past month's history in machinery circles has been simply a record of unchanged activity along lines, which the trade laid down so successfully during the first six months of the present tidal wave of prosperity. Without exception all branches of iron working are busy and anticipating a most excellent trade throughout the year. The condition of order books at this time insures high pressure activity for the next four to six months, and good reasons exist for expecting the last half of the year to be satisfactory. The general opinion exists, however, that with the increased and increasing facilities a keener competition will undoubtedly be felt.

The most important matter before the public just at this time is the big water works contract which, as mentioned in previous issues of *The Iron Age*, was thrown up by the Lane & Bodley Company. Their bid was near \$525,000, and in the discussions over the situation the Water Works Commission have freely vented the opinion that a similar contract at this date could not be had for much short of \$1,000,000. There is so much of political partisanship in all reports of the case that it is well nigh impossible to get an unbiased view of the facts. The charge is made by the Lane & Bodley Company that the present specifications are made with the view of throwing the contract to a lake city concern. This charge is, of course, receiving support from a number of prominent people and papers who see in it a thinly veiled scheme to shake the public plum tree for private profit. Just at this time comes President and General Manager E. D. Johnston of the H. F. & P. M. Roots Company of Connersville, Ind., with a proposition that if the Water Works Commission will alter the specifications so as to admit of his company entering into competition, they stand ready to make a proposition to furnish machinery to do the required amount of work for a sum that will not be in excess of the original Lane & Bodley bid. In reply to this proposition the Commission say that if they at this time altered the specifications the Lane & Bodley Company would have some show for the damages which, they have notified the Commission, it is their intention to sue for. The Commission further say that the Roots Company are at liberty to make and present an independent proposition which will receive attention at the proper time. The general public, however, do not expect the Roots Company to enter the lists under conditions which would indicate a prejudgment against them. President Johnston assured the Commission that he was actuated by no philanthropic idea of saving \$500,000 for the dear people, but that his company saw a nice profit in the job if they were allowed to work out the proposition on lines original to their own shops. And right there for the present the whole matter is hung up.

The J. A. Fay & Egan Company have recently held their annual meeting and reorganized for the coming year. The only material change in the management is that W. H. Doane, who has been out of active touch with the management for the past few years, has again entered the directory. The annual report shows a very satisfactory condition. The regular quarterly dividend of 1½ per cent. on the preferred stock was ordered paid, and in addition 1½ per cent. was also declared payable at the same time, the last mentioned being a payment on the deferred dividends due on the preferred stock, which is cumulative. The announcement was also made that at the next quarter another deferred dividend would be paid. The company have just completed the last of a ten carload shipment of machines for exhibit at the Paris Exposition. The last carload went off on Tuesday, February 20. G. P. Altenberg and his brother-in-law, C. P. Egan, have already sailed from New York, and will remain in charge of the exhibit during the length of the exposition. One of the most out of ordinary contracts taken by the company in recent months was for the complete outfitting of a new furniture factory in Texas. The contract calls for 65 machines, and is evidence that a new field for furniture manufacturers is being opened up. The saw mill trade is unusually active, with orders for 30 mills now on the company's books. Export trade to Russia is said to be more than good. South America and Mexico are also making a good showing. Nearly all the activity comes from furniture factories and car shops. Planing mills are quiet and but little business is coming in from the Northwest. Ohio furniture and car shops have been especially active.

The R. K. Le Blond Machine Tool Company are just completing an addition to their shops, which gives them an additional floor space of 12,000 square feet. They are finding it difficult to get the machinery long since ordered for the additional equipment, but will

gradually get in shape and be fully running in perhaps the next 60 days. They shipped four lathes and a milling machine for exhibit at Paris last week. They have extended the Hyatt roller bearing equipment with which the old shop was fitted to the new addition, and now consider they have a model plant throughout. January trade was only fair, but February has made a showing which brings both months ahead of last year's average.

The Cincinnati Machine Tool Company have just shipped their first lot of 28 and 32-inch drills, and are now at work on their first lot of 36 and 42-inch. In their shops they now have 187 drills of all sizes in process of manufacture and the whole lot contracted for, which is a pretty good record for a new shop. They recently issued a statement to their agents, telling that they were unable to accept any more orders for delivery prior to July next. Since then they have been getting in quite a nice lot of orders for later delivery. The outlook is so favorable that they have decided to commence at an early date the erection of an addition to their present quarters, which will give them, when completed, about 100 per cent. additional floor space.

The Bickford Drill Company have a very good report to make regarding the state of trade, and say that new business is just as active as it has been at any time. Their capacity has been tested to such an extent as to require a new power plant, which is to be installed within the next few weeks. Last week they shipped three of their machines to Paris for exhibition at the great show.

The Silk-Anderson Machine Tool Company report business a little slower, but still equal to their ability to care for. In addition to the 18 and 20-inch lathes which they have been making they have recently got out their first 16-inch machine.

The Hoeflinghoff & Lane Foundry Company have recently received quite a lot of orders for cast iron architectural columns for both Cincinnati and the surrounding territory. One of the best orders taken was for columns for the new building to take the place of those destroyed in the recent conflagration at Dayton, Ohio.

The L. Schreiber & Sons Company have just received four good sized orders for architectural iron work from points in Mexico. This seems to indicate the opening up of a field not usually productive of that kind of orders. The same company have also taken the contract for the building to be erected by the Eagle White Lead Company of this city. Work is coming into the shops as actively as it did last year, and the promise for 1900 is regarded as good.

The New York Machinery Market.

Office of *The Iron Age*, 232-234 William street, }
NEW YORK, February 23, 1900. }

Since our last writing a rather uneventful week was passed in the machinery section. While the tone of the market is steady, purchasing has not been very active, and the buying which was done was rather on a small scale. The machine tool trade reports a fair aggregate of business coming, though mainly in orders for single machines and small parcels. Only one transaction of any considerable size was reported. The purchasers were one of the large electrical companies, and it is said that they bought something like \$25,000 worth of tools.

In engines, boilers and all other machinery lines the market borders even on dullness. It is said that very little disposition is shown to close on work. Inquiry has, however, not fallen off very materially. Merchants seem to think that their prices scare the prospective purchasers away, and it is thought that consumers are waiting expectant to see a fall in the prices of materials. This is especially noticeable in the boiler business, owing to the apparent weakening of the prices of boiler plate. Boiler shops are still pretty well filled with work, however, and the builders show a disposition to wait just as long as the consumer waits. Consequently prices hold firmly and we hear of no change. This condition is found to prevail in all branches of the machinery market.

Probably the largest deal now on the tapis involving power generating machinery is that of the United Railways of Baltimore. This company will concentrate their various electric power stations, which are now scattered throughout the city of Baltimore, into one central station. They will require in this work about 16,000 horsepower of new boilers, engines and accessories.

C. C. Worthington, who has for a number of years been one of the most prominent men in the steam pump business, and who was elected president of the International Steam Pump Company just a year ago, resigned that position at the annual meeting of the company, held a few days ago. We are informed through unofficial sources that Daniel O'Day has been chosen to succeed Mr. Worthington as president of the International Steam Pump Company. The other officers of this company, it is said, are Marcus Stein, vice-president; John W. Dunn,

second vice-president; James H. Snow, secretary, and Max Nathan, treasurer. In addition to holding the presidency of the International Company, Mr. O'Day is vice-president of the Worthington Pumping Engine Company, president of the Snow Steam Pump Works, and vice-president of the National Transit Company, which company control the pipe lines of the Standard Oil Company. It is said that the presidency of the Worthington Pumping Engine Company is at present vacant. Men in the trade are familiar with the great success achieved by Mr. Worthington as president of the Worthington Pumping Engine Company and the several allied companies.

A movement which is receiving much consideration and support in the trade seeks to establish in this city a permanent exhibition of machinery and operate in connection with it export departments, which will encourage foreign trade in American machinery. The style of the organization is the International Land & Exhibition Company. Albert Kimmert, who is well known in shipping and export circles, is the president of the new company. W. D. Omasta is the treasurer, and M. F. Shea is the secretary. The company have a capital stock of \$500,000, and are located in the Bowling Green Building. A space of 5000 square feet, occupying the northwesterly quarter of the ground floor of the Bowling Green Building, will be devoted to exhibiting machinery and manufactures, forming a permanent free exhibition. Power will be supplied and all machinery requiring power will be shown in actual operation. In addition to exhibiting the machines, actual sales will be made on the floor. The exhibition will thus serve also as a New York office for the exhibitors. Arrangements have been made to attract arrivals on incoming steamers and out of town buyers to the exhibition, which will be under the management of Albert H. Lins.

The export department has been divided into three branches, one attending to all of Europe, one Mexico, Central and South America, and one branch for Asia, Africa and Australia. The object of this department is to extend the business of the clients of the company in foreign fields. The company have confidential agents located in all important cities in Europe, and besides the securing of export orders arrangements are made for exclusive agencies, &c. Charles H. Thurston is the manager of the European department and Albert Krimmert is manager of the other export departments. Among the concerns now represented are manufacturers of machine tools, cranes and hoists, screw machines, gas engines, chucks, brewing machinery, bottling machinery, ice and refrigerating machinery, laundry machinery, rope machinery, special wood working machinery, automatic pumping machinery, air compressors, knitting machines, typewriters, agricultural implements, automobiles, babbitt metal, hardware specialties, twist drills, mining machinery and tools, steel rails, emery wheels, portable railways, fire pots and torches, carriage and wagon wood stock, electrical machinery and appliances and power generating machinery.

The Navy Department has ordered for installation in the Boston Navy Yard two 500 feet compound air compressors. The New York Air Compressor Company were awarded the contract. The interpretation given to this transaction is that pneumatic tools will be extensively employed at the Boston yards. Consequently the trade are looking for specifications for a quantity of pneumatic tools.

We are informed that the factory formerly occupied by the Liberty Cycle Company, at Bridgeport, Conn., is being refitted for the building of automobiles.

The Gates Iron Works of 11 Broadway have just received an order from the Amalgamated Copper Company for a mine hoist to be installed at the Isabel, Tenn., property of the company.

The American Tools Works Company have received an order for several large special lathes with a face plate extending over end of machine, from the Alex. Smith & Sons Carpet Company of Yonkers, N. Y.

The Primus Cooking & Heating Apparatus Company are building a new factory in Jersey City, N. J. They are purchasing the equipment. McClave, Hamilton & Rimmer of 85 Liberty street were awarded the contract for the engine plant.

The Wilhelm Grisser Construction Company of 11 Broadway are building a new brewery at Haggerstown, Pa., and have awarded the contract for the power transmitting machinery to F. H. Gottlieb of 133 Liberty street.

The Western Rawhide & Belting Company of Hammond, Ind., and 120 Liberty street have been awarded a large contract for belting by the Charles H. Baker Mfg. Company of Tarentum, Pa.

Percy A. Sanguinetti, designer of factories and power plants and special machinery, has opened offices at 39 Cortlandt street, New York.

J. M. Duncan, manufacturers' agent, has established offices in the Monroe Taylor Building, 39 and 41 Cortlandt street. Mr. Duncan's specialties are power plants,

self sustaining chimneys, steam boilers and engines, tanks and plate work, feed water heaters, separators, &c.

The American Machinery & Trading Company have established a main office in the Bowling Green Building, with branch offices in the largest cities in the United States and in all foreign countries. They have arranged for a large corps of traveling salesmen and correspondents, buyers of machinery, hardware, &c., throughout the world. They solicit exclusive agencies and special prices from manufacturers of all kinds of machinery in this country.

Coke Wages Advanced.

(By Telegraph.)

PITTSBURGH, PA., February 28, 1900.—The H. C. Frick Coke Company of Pittsburgh and other smaller coke concerns have given their employees in the Connellsville region a voluntary advance in wages, averaging 12½ per cent., to date from March 1. The new scale of wages is as follows: Mining and loading room and rib coal, \$1.25 per 100 bushels; mining and loading heading coal, \$1.40 per 100 bushels; mining and loading wet heading coal, \$1.45 per 100 bushels; drawing coke per 100 bushels charged, 72 cents. All the above by same measurement as at present. Drivers and rope riders (shafts and slopes) per full run, \$2.35; drivers and rope riders (drifts per full run), \$2.25; cagers, per full run, \$2.35; track layers, blasters and timbermen (shafts and slopes) per day, \$2.35; tracklayers, blasters and timbermen (drifts) per day, \$2.25. All day labor not mentioned above regularly employed in the operation of the plants now receiving \$1.60 and over per day, to be advanced 15 cents per day; and all receiving less than \$1.60, to be advanced 10 cents per day. Leveling, per oven, 12 cents. Forking box and stock cars and forking open top cars from yard, all to be advanced 15 cents per car over present price, payments semi-monthly, same dates as heretofore.

The above wages are the highest ever paid to coke workers in the history of the coke trade. In 1879 and 1880 furnace coke sold as high as \$5.25 a ton, but labor was not paid within 10 per cent. as high as the above figures. The number of laborers in the Connellsville region averages about one man to each oven, and as there are slightly over 20,000 ovens, it can be said that 20,000 men will participate in this voluntary advance.

James Bowron on the Outlook.

James Bowron of the Tennessee Coal, Iron & Railroad Company, in a letter recently addressed to Rogers, Brown & Co., reviews the outlook as follows:

"I have not believed and still do not believe that there is any prospect for a material change (in the iron market) either upward or downward. The Tennessee Company, taking into account the requirements of the steel works at Ensley, in addition to the orders already on their books, have 488,000 tons of their product for the remainder of this year already taken up. On the basis of the present output, we will have for the remainder of the year from this date about 700,000 tons to dispose of. Deducting the engagements already specified will leave us with 212,000 tons to put on the market.

"I can see no solid reason for anticipating any change in the tone of the market in a downward direction. There are two special reasons for this belief. There has been no business done for a year in the foreign market, but the volume of business on the books of the producers was so heavy at that time that all the available ship room had been taken up for a year and it is still not exhausted, but will probably be sufficient to take up the available room for another three or four months. At the end of that time the stoppage of supplies abroad will be keenly felt. Prices are extremely strong abroad, notwithstanding speculative fluctuations in the 'warrant yard,' which run up and down the gamut while makers' prices remain practically steady. The fact is that iron is scarce and is going to become more so in the foreign markets. I well remember the 'boom' in the iron trade which followed the Franco-German War in 1870. The same thing, I predict, will follow the Anglo-Boer War in the Transvaal. Scores of bridges will have to be rebuilt, rails relaid, water mains and pumps and winding engines reconstructed, or additional ones laid; machinery of every sort will have to be replaced, and, in fact, the whole of an active mining country will have to be substantially re-equipped. The conclusion of the war, however, which only can take place upon conditions giving liberty to enterprise and civilization to enter the country, will necessarily lead to a great extension of development, including additional railroad construction. At the same time, the English nation has been put on notice of the necessity for reconstruction of its artillery, but, on a more powerful scale, not only of its military forces, but

to some extent of its navy. The German Emperor has decided to swell his navy to English size or burst (financially). The Russians are straining their financial powers not only in the completion of the Siberian Railway to get ready for the coming test for supremacy on the Pacific, but, to facilitate their designs on Afghanistan and India, they are projecting a trans-Persian line. The English Government is now relieving 8,000,000 people from famine, owing to the drought in India, and of that number 2,000,000 are at work on public works. The grading which they are doing will all be utilized for either canals or railroads a little later on. The construction of railways in China is assured and progressing.

"In all these enterprises the United States has an equal showing with, or a better one than, England. As you know, the sacrifice of \$1 per ton would to-day enable Alabama iron to be sold against English iron in almost any European market, and this would restore a trade of 200,000 tons per annum which, for one entire year, Alabama has dispensed with. This in itself is a solid massive prop under the market, and I cannot see any possibility of it going off more than \$1 for this reason alone.

"Then take the fuel situation. Within the past week our company have had application for 100,000 tons of bituminous coal from New England and 50,000 tons of coke for the Pacific. We are receiving requests for fuel from Northern States, Mexico, Spain, Italy, Australia and South America. At the present time we have none to spare and are even refusing carload orders. The withdrawal of so many men from their daily work to serve with the English militia battalions has already led, among other inconveniences, to a scarcity of English coal. The price of screened steam coal and of house coal has advanced from \$2 to \$2.50 per ton. Four blast furnaces were shut down in the Glasgow district the other day for want of coal, and for the same reason several rolling mills in Staffordshire ten days ago advanced the price of bar iron. This cause of trouble will grow worse instead of better, as additional reserve men are being called and will be called in England to serve with the militia.

"In addition to these causes, the foreign iron trade is further handicapped by an advance in freights owing to the engagement of over 200 steamers by the British Government for war purposes. This advances the cost of foreign ore, which is so largely used in England. Unless there is some general cause leading to a restriction of consumption in the United States, I am compelled to think, therefore, that a maintenance of substantially existing conditions may be depended upon for the remainder of this year."

Mr. Bowron says in conclusion that the only clouds upon the situation that he can see are: 1, A coming campaign of Bryanism and demagoguery; 2, Inflation in the stock market, which, combined with the stoppage of the Transvaal gold receipts and the efflux of gold for African war purposes, may lead to a long and greatly increased financial pressure, which ultimately will stop the industrial boom by a financial panic.

PERSONAL.

Fritz Bergingrin has resigned as chief draftsman of the Pennsylvania Steel Company to devote his attention to the firm of John C. Stulen & Co., of which he is a member. On Saturday he entertained the engineer corps of the construction department at a banquet at the Lochiel Hotel, Harrisburg. There were covers for 40.

Edmund E. Johnston, chief chemist of the Ashland Iron & Steel Company of Ashland, Wis., has resigned to accept a similar position with the Manistique Iron Company of Manistique, Mich., one of the furnaces under the control of the International Car Wheel Foundry Company. Mr. Johnston has been with the Ashland Company for the past ten years. He introduced a system of grading pig iron by analysis about five years since, which has given satisfaction.

W. H. Nelson of Ishpeming, Mich., succeeds H. E. Burt as manager of the charcoal furnace at Manistique, Mich.

George T. Oliver of Pittsburgh has withdrawn from the directorate of the American Steel & Wire Company. Mr. Oliver was elected a director for one year, and his term having expired, he retired.

Alexander Gordon of the Niles-Bement-Pond Tool Company sailed for Europe last week on business connected with the company's plant now being erected near Berlin, Germany.

John S. Fackenthal of Easton, Pa., has been appointed superintendent of the Darham Iron Works furnace at Riegelsville, Pa., in succession to H. B. Weaver.

At the annual meeting of the Stilwell-Bierce & Smith-Vaile Company, held recently at Dayton, Ohio, J. H. Vaile was elected president to succeed R. N. King, and E. F. Platt was elected treasurer in place of F. H. Jones.

Robert McCance of New Castle, Pa., has been appointed auditor of the American Steel Hoop Company, with headquarters in Pittsburgh.

F. G. Coffeen, formerly connected with the Deering Harvester Company of Chicago, has assumed charge of the plant of the Duluth Foundry & Machine Company, West Duluth, Minn.

John W. Darby of the Brymbo Steel Works, Wales, has returned home.

Francis H. Saylor has resigned the superintendency of the Pottstown Bridge Company, a position which he has filled since the resumption of the works about a year ago.

A typographical error in the Consolidation supplement of *The Iron Age*, published last week, made it appear that the Sloss-Sheffield Steel & Iron Company owned only two-fifths of the stock of the Lady Ensley Furnace Company. The figure should read two-thirds. We understand that the Sloss-Sheffield Company now own over 99% per cent. of the stock of the Sloss Company, and that additional amounts of stock have been received since our report was made up.

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QUOTATIONS OF IRON STOCKS DURING THE WEEK ENDING FEBRUARY 28, 1900.

Cap'l Issued.		Sales.	Thursday.	Friday.	Saturday.	Monday.	Tuesday.	Wednesday
\$29,000,000	Am. Car & Foundry, Common..	2,060	.....	15½-15½	-15½	15 -15½	15 -16	-15½
29,000,000	Am. Car & Fy, Pref. (7½ Non-Cu.)	1,075	.....	-63	-63	62 -62½	62 -62½	.....
19,000,000	Am. Steel Hoop, Common.....	20,750	.....	43½-46	42½-44	43 -43½	39 -43½	40 -41
14,000,000	Am. Steel Hoop, Pref. (7½ Cu.)..	400	.....	83 -84½	.....	.....	.....	.....
50,000,000	Am. S. & W., Common.....	46,018	.....	57 -58½	57 -57½	55½-57½	56½-57½	57 -57½
40,000,000	Am. S. & W., Pref. (7½ Cu.)....	2,020	.....	92½-93½	92½-92½	91½-92	91½-92	91½-92
28,000,000	Am. Tin Plate, Common, N. Y..	4,720	.....	31½-33½	-31½	31½-31½	31½-31½	31½-31½
18,000,000	Am. Tin Plate, Pref., N. Y. (7½ Cu.)	750	.....	81 -82	.....	.....	81½-81½	.....
7,500,000	Bethlehem Iron.....	24	.....	.....	.....	-58	.....	.....
15,000,000	Beth. Steel, Par \$50, \$1 paid in.	475	.....	17½-17½	.....	-17½	.....	-17½
7,974,550	Cambria Iron, Phila.....	516	.....	.....	.....	-44	-44	-44
16,000,000	Cambria Steel.....	2,166	.....	21 -21½	-21½	20½-21½	20½-20½	-21
11,000,000	Col. Fuel and Iron.....	7,610	.....	43½-45	43 -43½	42½-43½	43½-43½	43½-44½
46,484,300	Federal Steel, Common.....	32,405	.....	52½-54½	52½-53½	52½-53½	52½-53½	52½-53½
53,253,500	Federal Steel, Pref. (6½ Non-Cu.)	4,773	.....	74 -74½	73½-74	73 -73½	73 -73½	73½-74
32,000,000	National Steel, Common, N. Y..	19,639	.....	46½-48	46½-47	45½-47	45½-47	46½-47
27,000,000	Nat'l Steel, Pref., N. Y. (7½ Cu.)	1,144	.....	-96½	-96	-95	94 -94½	-94½
5,000,000	Penna., Common, Phila.....	.....	.....	.....	.....	.....	.....	.....
1,500,000	Penna., Pref., Phila.....	.....	.....	.....	.....	.....	.....	.....
12,500,000	Pressed Steel, Common.....	1,400	.....	55 -55½	55½-55½	54½-54½	54½-54½	.....
12,500,000	Pressed Steel, Pref. (7½ Non-Cu.)	790	.....	86 -87	-87	-86½	-86½	-86½
27,352,000	Republic Iron & Steel, Common.	6,050	.....	22½-24½	22½-23	22½-23½	22½-23½	23 -23½
20,852,000	Repub. Iron & Steel, Pref. (7½ Cu.)	1,886	.....	67½-68½	.....	67½-67½	-68	-68
20,000,000	Tennessee Coal and Iron.....	39,741	.....	94½-100	92½-95½	87½-93½	90½-93	91 -94
1,500,000	Warwick Iron & Steel (par \$10)	5,830	.....	.....	-10	10 -10½	10½-10½	-10½

* Par \$50. ** \$1.50 per share paid in. † 6% guaranteed by Beth. Steel Co. Late Philadelphia sales by telegraph. ‡ Ex-dividend.

Bonded indebtedness: Am. S. & W., \$130,656; Am. Tin Plate, none; Am. Steel Hoop, none; Cambria Iron Co., \$2,000,000 6% debenture 20-year bonds, 1917, payable option 5 years, assumed by Cambria Steel Co.; Federal Steel Co., \$13,200,000 Illinois 5% \$7,417,000 E. J. E. R. 5%, \$1,000,000 Johnson 6% \$6,732,000 D. & I. R. R. 5%, \$1,000,000 2d D. & I. R. R. 6%, \$10,000 land grant D. & I. R. R. 5%; National Steel, \$2,561,000 6%; Tennessee C. I. & R. Co., \$3,387,000 6%, \$1,114,000 7%, \$1,000,000 7% cu. pref.; Pennsylvania Steel, \$1,000,000 5% Steelto 1st 1917, \$2,000,000 5%. Sparrow's Point 1st 1922, \$1,000,000 consolidated, both plants; Bethlehem Iron \$1,351,000 5% maturing 1907. Interest and principal guaranteed by Bethlehem Steel Co. Republic Iron & Steel, none; Warwick Iron & Steel, none. Colorado Fuel & Iron Co.; Col. Fuel Co. Gen. Mort. 6% \$840,000. Col. Coal & Iron Con. Mort. 6% \$2,810,000. Col. Fuel & Iron Gen. Mort. 5% \$2,303,000. Also outstanding \$2,000,000 preferred stock with accumulated dividends of \$640,000 to June 30, 1899.

Iron and Industrial Stocks.

In some of the steel stocks there has been a little more activity during the past week, generally, however, at the expense of values. Monday particularly was a trying day, the weakness of the general market affecting the industrials generally. A considerable part of the decline was to-day recovered.

	Bid.	Asked.
American Bicycle Company, Common.....	15	16
American Bicycle Company, Preferred.....	44	46
American Bicycle Company, Bonds.....	.....	90½
Empire I. & S., Common.....	18	20
Empire I. & S., Preferred.....	55	60
E. W. Bliss, Common.....	135	150
E. W. Bliss, Preferred.....	125	.....
Cramp's Shipyard Stock.....	80	84
Diamond State Steel.....	4½	4½
International Silver, Common.....	8	9
International Pump, Common.....	17	17½
International Pump, Preferred.....	63½	65
National Tube, Common.....	53	53½
National Tube, Preferred.....	93	93½
Otis Elevator, Common.....	22	24
Otis Elevator, Preferred.....	86	88
Pratt & Whitney, Common.....	3½	5
Pratt & Whitney, Preferred.....	46	54
U. S. Projectile.....	95	105
Sloss & Sheffield Steel & Iron, Common.....	29	30
Sloss & Sheffield Steel & Iron, Preferred.....	67	69
Tidewater Steel.....	14½	14½
U. S. Cast Iron Pipe Company, Common.....	8	9
U. S. Cast Iron Pipe Company, Preferred.....	48	50
H. R. Worthington, Preferred.....	101	.....
National Enam. & St., Common.....	27½	27½
National Enam. & St., Preferred.....	86	89

Secretary Roberts of the American Steel & Wire Company gives notice to holders of common stock that the dividends, aggregating 7 per cent. for the year, will be payable as follows: To stock of record March 19, 1¼ per cent., payable April 2. Books close March 19 and reopen April 3. To stock of record June 18, 1¼ per cent., payable July 2. Books close June 18 and reopen July 3. To stock of record September 17, 1¼ per cent., payable October 2. Books close September 17 and reopen October 3. To stock of record December 17, 1¼ per cent., payable January 2, 1901. Books close December 17 and reopen January 3.

The William Cramp & Sons Ship & Engine Building Company have declared a regular quarterly dividend of 1¼ per cent., payable March 15. Books close March 5 and reopen March 16.

The stockholders of the Pennsylvania Steel Company will hold their annual meeting on March 13.

A plan is being circulated among stockholders of the Tennessee Coal, Iron & Railroad Company to be submitted to the meeting on March 13. The plan contemplates the issue of \$3,000,000 additional common stock, raising the total outstanding amount to \$23,000,000, to retire the \$1,000,000 of 8 per cent. preferred stock and 54 per cent. accumulated dividends thereon. It is proposed to offer the preferred stockholders for each share with the 54 per cent. accumulated dividends as of April 1 180 per cent. in new common, which is equivalent to a premium of 26 per cent. A large percentage of the preferred stockholders have assented to the plan. The

\$1,200,000 of new common to be issued over the amount required to retire the preferred stock will be offered at par to the stockholders and underwritten. The proceeds from the sale of stock will be used to pay for the three Sheffield furnaces which have been acquired, together with the ore and coal properties connected therewith; also for building a finishing mill in connection with the steel works, to pay for the Bessemer rolling mill and other improvements.

Baring, Magoun & Co. of New York will pay the coupons due March 1 from the American Bicycle Company 5 per cent. sinking fund gold debentures on and after that date upon presentation at their office.

The Tennessee Coal, Iron & Railroad Company report for January:

	1900	1899.	Changes.
Net earnings.....	\$312,972	\$79,337	Increase, \$233,635
Fixed charges.....	54,776	46,563	Increase, 8,213
Surplus.....	\$258,196	\$32,774	Increase, \$225,422

The fixed charges include the charges of the Alabama Steel & Shipbuilding Company assumed by the Tennessee Coal, Iron & Railroad Company.

The Colorado Fuel & Iron Company invite proposals to be sent to the Atlantic Trust Company before April 5 for the sale of \$40,000 of their outstanding bonds to the sinking fund.

The directors of the Republic Iron & Steel Company have declared the regular dividend of 1¼ per cent. on the preferred stock, payable April 2. Books close March 15 and reopen April 3.

An official statement by Jos. H. Hoadley, president of the International Power Company, is to the following effect: A dividend at the rate of 6 per cent. on the preferred stock payments has been declared as of January 1, 1900, for the year 1899, and in addition thereto the \$300,000 mortgage on the Corliss Steam Engine Company has been taken up and is now under obligation for only \$150,000. We have also expended over \$75,000 in betterments, and now have in process of plan and negotiation additional improvements which will entail an expenditure of \$150,000 in the near future. With these contemplated improvements our output will be much increased and manufacturing cost diminished. January sales of locomotives for plant No. 1 were \$309,310, while engine sales of plant No. 2 were \$102,020, a total of \$411,330.

Option has been given to the Frankford Forge Company of Philadelphia for a tract of land within Eddystone Borough, Pa., adjoining that of the Gruson Iron Works. And if satisfactory arrangements can be completed the company will remove the plant to the place mentioned.

For some time experiments have been progressing in the vicinity of New York to test the process invented by Charles Fletcher of Boston to copper plate steel sheets by rolling them together. Report has it that Frank Rockefeller of Cleveland is looking into the process.

HARDWARE.

Condition of Trade.

THE jobbers almost universally, and many manufacturers, find the volume of trade this year comparing well with that of 1899. This results from the general prosperity which prevails throughout the country and the steady consumption which is constantly going on. Conditions, of course, are very different from those of a year ago. There is now practically none of the speculative element in business and few orders are being placed in anticipation of coming advances. There is, however, a more general employment of labor and a better condition of the people at large. The high prices on many commodities are undoubtedly limiting consumption, but this is more than made up by the increased activities in other directions and the more liberal expenditures which better times permit. There is, however, a conservative feeling pervading the trade and all classes are prudently avoiding undue stocks, considering the possibility of a reduction in prices. Manufacturers are therefore cautious about accumulating too heavy supplies for the coming season, as they are now most of them paying new prices for raw material and any shrinkage in this would diminish the value of their goods on hand. Jobbers are pursuing the policy of marketing goods of which ample stocks in most lines are still in their warehouses, and to do this are shading prices somewhat. The retail merchants, too, taking substantially the same view as the makers and distributors of goods, are careful not to load up their shelves with high priced wares, but are purchasing moderately, keeping up their stocks with a fair but not heavy assortment. The changes in the market are few and slight advances are to be noted. The change in the marketing of Wrought Iron Pipe, which has been adopted in the interest of the jobbing trade, is noted in another column. Some slight concessions are being made by manufacturers who desire to secure orders which are within reach. As a general rule the market is firm and well sustained and has an excellent tone.

Chicago.

The Shelf Hardware trade is not quite so active with those doing a nearby trade, but the jobbers who cover more extensive territory report that they can see no falling off in the volume of business now coming in. Many orders placed some time since for delivery, beginning March 1, will be filled this week, and these orders are so heavy as to keep packers and shippers busy for some little time. The trade in staple goods is admittedly somewhat lighter than it has been, which is due to extremely bad weather, which, of course, is only a temporary matter. The demand for building materials is further affected in the Chicago trade by the labor troubles, which have almost completely stopped building operations. Rather sharp competition is now felt for orders for Stove Boards for fall delivery. A contest is being made over this trade for some reason, and prices practically represent no advance over those made a year ago when materials were much cheaper. The heavy Hardware trade is in good shape with plenty of business now being done.

St. Louis.

The trade conditions are even and uneventful, and but little can be recorded. Movement of nearly every line is greater than usual at this period, the aggregate business for the first two months of 1900 scoring substantial gains. Except in seasonable goods, which of necessity must be anticipated as to supply, current sales largely represent customers' wants at the counter, thus accentuating the prosperity of the times. The trade itself feels that top prices have been reached, and while no unusual softenings are looked for no opportunity for speculations, it is said, exists. Action in Steel goods is satisfactory for the season, and a big demand is looked for in the spring, notwithstanding the high prices. A little holding off, it is said, is manifested as to Scythes, with probability that sales will be smaller than in previous years, owing to present quotations. Southern trade is heavy, especially on Steel goods, whose sale is confined to that clime. Builders' Hardware is growing in demand. Tin Plate is having larger sales. Orders for Soft Sheet Steel of Stove Pipe gauges are being freely placed. Advance orders for Refrigerators and Ice Cream Freezers are also a feature. Galvanized and Black Iron at stiffening prices is attracting attention, and the season opens up well for Corrugated Roofing. What is said of the Shelf Hardware trade as to volume of business experienced during January and February applies as well to the Heavy Hardware interests. The demand is said to be large, when it is recalled that the months mentioned are almost invariably extremely quiet to a trade influenced greatly by weather and its effects on country highways. Prices are apparently firmer on all Iron and Steel materials, and as to Sheets there is said to be an erroneous opinion abroad in regard to value. Mills are reported considerably behind in their orders for 1899, and with present stimulated demand no lower prices are expected.

Louisville.

W. B. BELKNAP & Co.—Prices are very steady and there seems to be no oversupply in goods yet awhile to depress the market. Indeed many goods are hard to get in assortment desired. Propositions for concessions from buyers are, as a rule, turned down, the factories being well enough supplied with orders to run on for quite a while apparently, although they may like to see business coming in faster at the other end. Still the consumption of the country is recognized to be on a huge scale, and it remains to be seen whether we cannot stand a fair supply of goods without a serious break in prices, or whether we are bound to be from three to six months behind orders, if we would sustain the market.

The foreign outlet is one now apparently wide open, and the most hopeful guarantee of the disposition and use of our excess.

The raw material to be used in construction, cars, houses, &c., is in good demand. The high prices do not seem to interfere with sales of this material. It looks as though it were going to be a year of a great deal of building and widespread improvement of previous construction.

We are sure that the readers of *The Iron Age* will be gratified by the supplement which appeared with the last issue on the combinations of Iron and Allied Industries. It is a most useful hand book for reference.

Nashville.

GRAY & DUDLEY HARDWARE COMPANY.—February is one of the three months in which the heaviest spring business is handled, but the volume of the Hardware business we do here during this month depends largely

upon the kind of weather we have. The weather has been very unfavorable for farm improvements, mining, building, or in fact outdoor work of any kind, and as a result business is not so good as it was in January, though the result of the month's work will not prove a disappointment to the Hardware jobbers, as they naturally expect some bad weather at this season of the year, and while they have not enjoyed the trade that they had in January, yet it has perhaps exceeded any previous February. The demand for goods covers a general line, and several new stocks have recently been purchased. The jobbers are all pretty well supplied with goods, and on a few lines are selling at manufacturers' prices. Prices seem about stationary, which gives the buyer an opportunity to draw a long breath, get his bearings and begin to shape his future course. If proper discretion is exercised by manufacturers, jobbers and retailers, the course of prices in the near future will not necessarily be downward. While any one who has investigated the subject will readily admit that a few articles in the Hardware line are being sold at unreasonably high prices, we are of the opinion that the majority of articles sold at the present market prices only make a reasonable return to the manufacturer and dealer for the amount of capital invested and labor employed.

Philadelphia.

SUPPLER HARDWARE COMPANY.—Trade in wholesale Hardware circles continues without any diminution in orders either in variety or quantity of goods, orders from salesmen both in number and volume continue unchanged, mail orders are also fair in number and volume; prices as a rule continue upon the basis of values that have existed since January 1. There appears to be no desire on the part of the jobber to sacrifice goods in order to effect sales, if we may except an isolated ripple that may always occur on the surface of trade. These ripples do not prevent safe sailing, and are usually of an unimportant nature and usually occur from causes or events which will continue so long as the world lasts.

We can safely say that while there are but small gradual inroads made upon the inventoried stocks of January 1 in the hands of jobbers, nevertheless there is a gradual reduction of stock (small as it may be, each month naturally must show some reduction). However, the variety and kinds of Hardware have increased and multiplied to such an extent during the last few years that what is now looked upon as a conservative and fair stock a few years ago would have been looked upon as almost inexcusably and hazardingly large. It is one of the instances in trade that does and always will make the jobber a necessary factor in trade. It is a factor that is a great benefit to the retail merchant, who will take advantage of the opportunities offered of calling upon this increased variety of styles and kinds which must stimulate his trade.

It is frequently the starving of stocks on the part of the retail merchant, and his refusal to keep abreast of the times in adding to his stock new kinds, styles and varieties of goods that has made possible to some considerable extent the inroads made upon their trade on the part of department stores, and even catalogue houses. We admit that the latter named competition depends largely on their underselling on second, third and fourth quality goods, goods discarded or not accepted by the various navy yards throughout the country during the past year and on auction goods. This is hard competition from the fact that the persons who receive these catalogues are not informed of the quality of the goods that will be sent them. We see from the recent meeting of the various retail Hardware associations throughout the country the eyes of many of them are being opened to this fact; we also see the desire of these persons in trade to keep abreast of the times with as good an article and as good quality of goods as it is possible for them to sell in their various locations. As a rule it will be found that many of the department stores when they first entered

into goods in the Hardware line have taken up many goods that were not usually kept by the average Hardware dealer throughout the country, and on these goods they have generally made a good profit. Unfortunately, however, they are gradually working into a regular line. The wise merchant, however, will make every effort to increase the variety of goods he carries, and thus not depend upon the leading articles that are daily called for, which, while they are sure of daily or weekly sales, do not insure the same margin of profit as other goods not kept by every small retail house, in fact by every cross-road house throughout the country.

Collections continue fair.

Baltimore.

CARLIN & FULTON.—Business, considering the time of year, is about all that can be expected. The excitement is lacking which existed one year ago at the beginning of what was to be a new era in trade; and the speculation which then attended the formation of pools, trusts and combinations has now been succeeded by the legitimate demand which represents the every-day consumption of goods.

Prices are being well sustained, and why should they not be? A reaction of 25 per cent. in the prices of raw material could occur without affecting in the least the present prices of manufactured Hardware. We must bear in mind that the manufacturers who were working during last year with stocks of Iron and Steel contracted for perhaps during the previous year in very few instances advanced their quotations anywhere near the market prices of raw material; and unless there should be some reaction it seems hardly possible how the present quotations on Shelf Hardware, Cutlery and such goods as have not advanced more than 50 per cent. can continue in face of a strong market for raw material at an average advance of perhaps 125 per cent. over the costs in 1898. Even were goods not controlled so largely as they are by the merging of former competing interests into trusts or pools, there would be no motive for the acquiring of business at less than the cost of production; and as far as manufacturers' prices are concerned we see no reason to anticipate lower figures during the present year. We do not advise our friends in the trade to purchase more goods than they naturally would, as we can see no advantage in speculation, but there is no reason why any one should not carry in his stock every dollar's worth of goods at present prices which his trade will demand in the natural course of business.

The Currency bill, if passed by Congress, will definitely settle the financial policy of this country for a long time to come, and with our manufacturing interests well employed, good prices for our agricultural products and an almost universal healthy state of trade throughout the entire world, there is no reason why this year should not be, especially to the Hardware trade, one of great prosperity.

San Francisco.

MILLER, SLOSS & SCOTT.—The trade for February has shown up very favorably indeed for all points on the Pacific Coast, except Southern California, where rain is very badly needed. At the present writing, however, it is raining, and the northern and middle portion of California having received considerable benefit, if the rain reaches the southern part of the State it will be the means of stimulating trade in that section.

The demand for Agricultural goods is already starting, and is far in excess of what was called for during the previous years. All indications point to a very prosperous season on the coast.

The demand for Building Hardware is good and several contracts have been let for several large buildings to be erected in San Francisco. Notwithstanding the prevailing high prices on staple goods, there is a large demand for same, both for home consumption and for export trade.

The rush for the new diggings at Nome is just begin-

Single cars of Plain Annealed Wire, \$3 38; Painted Barb Wire, \$3.98; Galvanized Barb Wire, \$4.13, with 10 cents additional for small lots from jobbers

St. Louis.—Barb Wire is in somewhat better movement, but expected to make decided betterment as weather moderates. Painted in carloads is \$4.03; small lots are \$4.13. Galvanized commands an advance of 15 cents above these prices.

Pittsburgh.—Demand for Barb Wire is dull, buyers placing orders only for small lots in view of the expected decrease in demand owing to present high prices. For domestic trade we quote Painted Barb Wire at \$3.65 in carload lots to jobbers, with an advance of 15 cents for Galvanized, all f.o.b. Pittsburgh; terms 30 days or 1 per cent. off for cash in ten days.

Smooth Wire.—Buyers are placing orders for Smooth Wire more freely. The tone of the market is strong at the following quotations, f.o.b. Pittsburgh; terms 30 days, or 1 per cent. off in ten days:

To jobbers in carload lots.....\$3.05
To " in less than carload lots.....3.07½
To retailers in carload lots.....3.30
To " in less than carload lots.....3.30

Pittsburgh.—There is a fairly good demand and prices are unchanged. We quote: To jobbers in carload lots, \$3.05; to jobbers in less than carload lots, \$3.07½; to retailers in carload lots, \$3.30; to retailers in less than carload lots, \$3.30, all f.o.b. Pittsburgh. The charge for galvanizing is 50 cents on sizes from Nos. 6 to 14 inclusive; on Nos. 15 and 16, 85 cents, and on Nos. 17 and 18, \$1.10.

Chain.—Negotiations between the Chain manufacturers are still in progress. While the Standard Chain Company have been incorporated with a capital of \$3,000,000, it has not been finally determined what concerns will constitute it. It is probable, though not definitely decided, that the headquarters of the company will be in Pittsburgh.

Wrought Iron Pipe.—For some time past it has been rumored among the jobbers of Plumbers' Supplies that the National Tube Company were at work compiling a new price-list, upon which all sales of Wrought Iron Pipe would be made after March 1, 1900.

A radical departure will be made, in many respects, from old trade customs and methods of doing business. One of these is the intention of the company to distribute their Merchant Pipe through the jobbers. When the knowledge of the formation of the National Tube Company became general, the jobbers, quite naturally, were anxious to know what the new company's attitude toward them would be. Rumors were current at the time that the National Tube Company proposed to sell direct to the consuming trade, without regard to the jobbers' interests, thus making it unprofitable for them to handle this company's Pipe. The National Tube Company denied the correctness of this state of feeling on the part of the jobbers, because they believe it so obviously to their interest to work with the jobbers that they will give them every reasonable protection, thus encouraging them to increase their Pipe business and turn a share of their orders to the company. It is believed that the existence of the National Tube Company will be a guarantee to the jobbers of a staple market and of a steady supply from which they can work. Heretofore the jobber, in order to make a fair profit on his goods, had to speculate on an advancing market, and every jobber knows that speculation is always fraught with more or less danger. In order to facilitate the basing of prices the National Tube Company have taken the Pittsburgh district as the point of lowest cost of production. In this district the finished article is made directly from the ore, and skelp is shipped from this district to the various mills located at other points. Therefore it has been decided to make Pittsburgh the only free delivery point at the basing prices. Deliveries at other points will also be made, but the price will be sufficiently higher than the Pittsburgh basing price to cover the extra cost of delivery. The company will issue a book containing the list price of each size and kind. This book will also contain freight

rates from Pittsburgh to all other destinations. The list price will be the same for both Black and Galvanized Pipe, the difference being made in the discount. The following are the new list prices:

Pipe List.

¾-inch.....	\$0 05¼	3½-inch.....	\$0.95
1-inch.....	.05½	4 ".....	1.08
1¼ ".....	.05¾	4½ ".....	1.30
1½ ".....	.08½	5 ".....	1.45
1¾ ".....	.11½	6 ".....	1.88
2 ".....	.16½	7 ".....	2.35
2½ ".....	.22½	8 ".....	2.82
3 ".....	.27	9 ".....	3.40
3½ ".....	.36	10 ".....	4.25
4 ".....	.57½	11 ".....	4.75
5 ".....	.75½	12 ".....	5.30

Extra Strong Pipe List.

¾-inch.....	0 29	pound.....	\$0.11
1-inch.....	.054	".....	.11
1¼ ".....	.074	".....	.11
1½ ".....	1.09	pounds.....	.13
1¾ ".....	1.39	".....	.15
2 ".....	2.17	".....	.22
2½ ".....	3	".....	.30
3 ".....	3.63	".....	.36
3½ ".....	5.02	".....	.50
4 ".....	7.67	".....	.81
4½ ".....	10.25	".....	1.05
5 ".....	13.47	".....	1.33
5½ ".....	14.97	".....	1.50
6 ".....	18.23	".....	1.95
6½ ".....	20.54	".....	2.16
7 ".....	28.58	".....	2.90
7½ ".....	37.67	".....	3.80
8 ".....	43	".....	4.30

Double Extra Strong Pipe List.

¾-inch.....	1.70	pounds.....	\$0.25
1-inch.....	2 44	".....	.30
1¼ ".....	3 65	".....	.37
1½ ".....	5.20	".....	.52
1¾ ".....	6.40	".....	.65
2 ".....	9.02	".....	.95
2½ ".....	13.68	".....	1.37
3 ".....	18.56	".....	1.92
3½ ".....	22.75	".....	2.45
4 ".....	27.48	".....	2.85
4½ ".....	32.58	".....	3.30
5 ".....	38 12	".....	3.80
5½ ".....	53.11	".....	5.30
6 ".....	62 38	".....	6.25
7 ".....	71.62	".....	7.20

Cordage.—The demand for Rope is not large, the trade apparently holding off in anticipation of lower prices. That stocks are generally light in dealers' hands is indicated by requests for prompt shipments accompanying orders for small lots. A more active demand is anticipated when the spring trade sets in. Manila Hemp is expected to become scarce before the first shipments arrive, which are due in May. Sisal Hemp has advanced in price, so that there appears no immediate prospects of lower prices for Rope. There are still reports of some shading in prices by jobbers, subject to stocks on hand. Manufacturers' quotations for Rope in less than carload lots are as follows, with a reduction of ¼ cent per pound for carloads:

	Per pound. Cents.
Manila, 7-16 inch and larger.....	15½
" ¾ inch.....	16
" ½ and 5-16 inch.....	16½
Sisal, 7-16 inch and larger.....	10
" ¾ inch.....	10½
" ½ and 5-16 inch.....	11
" Lath Yarn, Medium and Coarse.....	9½

Manila Tarred Rope, 15 thread, is quoted at 15½ cents, as is also Manila Hay Rope, Medium.

Oils.—*Linseed Oil.*—But small lots of Linseed Oil are changing hands on new business. The market is firm at 56 cents in lots of five barrels or more, and 57 cents in lots of less than five barrels, for City Raw. Outside brands are held at 2 cents per gallon less. Crushers are busy on contract orders, but are not encouraging large purchases at current prices.

Spirits Turpentine.—The market has held dull throughout the week, with an absence of the usual demand. The new crop of Turpentine is due in April, and present prices are not expected to be operative after that time, so that there is no inducement for making purchases beyond pressing requirements. Quotations are as follows at this point: Southern, 55½ cents, and machine made barrels 56 cents per gallon.

Illinois Retail Hardware Association.

THE second annual convention of the Illinois Retail Hardware Association was held this week in Peoria. Over 70 actual members were in attendance at the opening session Tuesday afternoon, together with a large number of manufacturers, jobbers and others interested in the Hardware trade. The Chicago dealers turned out in good force, the delegation from that city numbering about 40.

The place selected for the meeting was Woodmen's Hall, well adapted for the purpose.

President C. T. Miller of Bloomington called the convention to order on Tuesday afternoon, and Henry Sandmeyer, Jr., of Peoria then introduced Mayor Lynch, who welcomed the members with a particularly hearty greeting. An appropriate response was made by the president.

The enrollment of new members followed, a substantial addition being made to the list, covering 51 firms, making the total membership 119.

President Miller's Address.

The president's address to the members was as follows:

In extending to you the greetings of hope underlying the purposes of our organization, I enter upon my duties to-day with every pleasure the good cheer and hearty co-operation your presence here implies.

MEMORIAM.

Yet with all the pleasures these things bring it pains me to miss from among us the pleasant faces and encouraging forces of our late brothers, Treasurer Theodore Krueger and Ehler Goettsche, a member of our Executive Committee, who, during the short term of our association's existence, an all wise Providence called from the active labors of life to an eternal rest. Mysterious as may appear to us the act that calls men from their uncompleted labors at a time when the experiences of life have broadened the intellect to an effective scope of usefulness and the spirit of hope and ambition is burning to devote these resources to the well being of one's fellow men as exemplified in the energy and devotion of these men in materializing this association, it impresses us with the important lesson derived from their lives and seeming untimely ends, to act to-day upon the issues intellect and conscience dictate, lest to-morrow it be too late and the grave will close over our bodies with nothing to remember the life that went out save the narrow mound which will cover the body as an emblem of the narrow and selfish limits of the departed spirit. The short term of our association's existence and the lack of mature plans of operation, as well as a lack of proper provision to act to the best interests of the association in all matters presenting themselves, or carry out such plans as your Executive Committee might have deemed proper under different circumstances, obviates the necessity of any lengthy report from your president. However, the experiences gained through this term are beginning to point out some of the necessary changes which I hope will be properly enacted by this convention.

First: I find that our constitution and by-laws are entirely inadequate to the purpose of our association. They create offices whose duties are too indefinite to insure proper division of the work, and create duties without providing means to accomplish them, and which needs call for an entire revision.

Second: Care should be exercised by this convention as well as by the committee upon whom may devolve the duty of revising these by-laws to keep the duties of officers and the means to accomplish them within reasonable harmony. Before this association had developed into permanent organization I opposed the \$3 limit of our dues as an unwise proposition, foreseeing that the limited means it provided would destroy the efficiency of our association. I still hold that if the results to be accomplished by this association are not worth more than \$3 a year, then they are too insignificant for you or me to waste valuable time upon the institution. Appreciating the fact that it is impossible for a committee to give these matters the requisite amount of thought and study during the time allowed by our meetings, I therefore suggest that the rules be suspended and a few amendments made under which the association may operate for the present year, and that the Executive Committee be in-

structed to report a revised form of constitution and by-laws at our next annual meeting.

A COMMITTEE OF PLUMBERS

will be here to discuss with us the revision of our State lien laws and solicit our support in their effort. See that its provisions are just, equitable and shorn of the many sided construction of our present law and then give it our hearty support. Do not forget that we also have important legislative matters to consider which will need all the co-operation we can secure.

The importance and justice to the retail trade of this State, who are burdened with their legitimate support of our various governments, demand that all peddlers, whether resident of the State or not, selling direct to consumers, either by personal solicitation or through catalogues, shall contribute to the support of each county in which they aim to do or do business an amount equal to the maximum amount of taxes paid by each one of the branches of trade with which they compete.

If an additional non-resident license can be secured, secure it in each of the counties in which they do said business, and place them upon the same basis of responsibility with the home dealer.

WE DO NOT ASK FOR RESTRICTIVE MEASURES,

but we do ask that these commercial piracies be taxed equal with ourselves and held equally responsible. If this proposition is unjust, then the State is dealing very unjustly with one of her most important interests—namely, the retail trade. If this proposition be wrong, then the conditions prevailing in this State regarding foreign insurance companies are equally wrong. The proposition will command the support of nearly every retail dealer, plumber and manufacturer in the State, and the force of such influences when properly directed should assure its enactment into an efficient law. Other matters of like nature will be brought before you by several speakers on the programme and a committee of seven, which I appointed several weeks ago to investigate subjects which I appreciated would require some previous investigation to enable a proper report at this convention, such as the Bankrupt law, Lien law, Parcel law, peddler's tax or license, fraudulent advertising, &c. Your officers have used their best endeavors to bring before this meeting every issue of importance to the trade, and I hope that every one here will add the force and influence of his views, no matter how meager they may be, in an effort to arrive at wise and just conclusions upon these subjects.

Another important feature to be considered by this convention is the spread of proper literature to bring the purposes of our organization before the trade and the public. The publishers of *The Iron Age* have made us a proposition to print in pamphlet form the proceedings of this meeting free of charge. And as this pamphlet would answer our purpose, I hope the convention will give this generous offer proper consideration.

NATIONAL ASSOCIATION.

At our fall meeting we adopted a resolution favoring a national association, and the efforts toward this end have resulted in a call for a National Conference, to be held in Chicago, March 12, for the purpose of inaugurating a uniform policy over the entire organized territory, and to consider the question of a national association.

At present we find that each State association not only lacks the force of influence greater numbers would give it, but the non-co-operative feature of these conditions also frustrates the purpose of association by allowing the support of ten organized States to institutions against which the one might have a just grievance.

The great importance a national association would become to the trade in successfully accomplishing that which at present is impossible for the single State association, the opportunity its meetings would provide to present and determine the issues pending in any State and bring these matters before our State associations to receive the uniform emphasis 3000 dealers can give such determination, are some of the tangible forces to recommend such association.

I believe, however, that beyond these reasons there are hidden forces underlying a proper national association, which will make the membership in a Hardware association of such commercial importance to the dealer that he cannot afford to stay on the outside. But as I am to address you to-morrow upon the commercial phase of present conditions I will confine my remarks to-day to a few

THOUGHTS BY THE WAYSIDE

upon their moral and political phase. It is not my desire to introduce into this body any question that may arouse partisan discussion and acrimony. However, being here to discuss and if possible discover and determine upon some effectual plan of operation to overcome what we substantially feel to be unjust conditions, bearing the semblance of civil and moral disease in our body politic, demands that we give proper consideration to all the phases these conditions may present lest, by false conclusions, we destroy the efficiency of our efforts.

The declaration of purpose of this association, as well as a large number of like associations from Boston to San Francisco and from the Dakotas to the Gulf, representing an interest as vast as the *personnel* and capital of the retail trade of this country, implies that its conception and institution must be the outgrowth of some great cause, some great evil, threatening the equipoise of forces which bind us together as one people and from force of circumstances is arousing men into that fellowship which in days gone by sounded the prelude of serious revolution. As retail merchants, whose support is drawn from all classes alike, demonstrating that our every interest is centered in an equitable distribution of the responsibilities and privileges of government and the equitable participation of labor in the wealth it produces, it behooves us to examine every phase of the issue before us, and perchance discover that the evils of which we complain are but symptoms of, or reflex pain, so to speak, of disease in the body politic, from which the interests of the masses suffer, and call for some plan of operation to again induce the organs of government to perform their respective functions with the animus peculiar to our federation. The manner in which the present unbalanced condition in our economic fabric is affecting various interests amazes one with the causes and remedies presented from the various standpoints from which the subject is viewed. And as we continue to compare and carefully study these presentations in our effort to seek the truth we are almost invariably forced to the conclusion that the evil designated as the cause of the trouble is but the symptom of a disease caused by some organ of the body politic failing to perform the proper functions of its respective office.

The reflex pain of disease in our physical body when mistaken as the seat of trouble sometimes leads to the application of nostrums which allay pain temporarily while the real evil continues to pour its corruptions through the system until its vitality is sapped and the body falls into irredeemable decay, is a law equally applicable to our political body. In this light I view the evils of which we complain and that we must needs seek the causes which produce these symptoms before we can apply a remedy with reasonable assurance of beneficial results. We may apply all the lotions known for a sick headache and never cure it as long as we continue to gorge the stomach with the causes that produce it, nor cure a cancer of the body by swallowing opiates to soothe the mind. The seat of the disease once discovered, remove the cause and the headache will cease from force of circumstance; while the knife unflinchingly applied in the other, while there is still sufficient vitality to withstand the ordeal, is the only sure and safe remedy. It strikes me that we have a good many people in this country at present who are endeavoring to cure our

ECONOMIC HEADACHES

by applying third party, anti-expansion and what not decoctions, while they are striving to gorge our political mire with the corrupt elements that breed the trouble, and to cure a dangerous cancer at the heart by prescribing liberal doses of imperial, partisan soothing syrup to soothe the public mind. But until the public mind discovers the real seat of the evil and becomes sufficiently aroused to the importance of removing the causes and unflinchingly puts the knife to the cancer we have little hope for permanent relief. As merchants we are in the habit of always seeking a cause for every effect and try to foresee the results likely to be produced by various conditions that daily confront us. And, while we may not possess the means of bringing specific political facts to the support of our ideas, I believe we are sufficiently intelligent to grasp the force of surrounding circumstances and devise some wise plan of operation whose influence will bring about a more healthful condition. When such men as Bourke Cockran give open and unmodified expression to the sentiment, "How are you going to regulate the trusts as long as the trusts regulate the regulator?" before the most complex audience of public men perhaps ever witnessed in one body, and the expression coming from a man from whose business relations we may have a reasonable doubt to infer he knows whereof he speaks, the circumstance and the man together should give the

words a proportionately greater importance than we usually accord to utterances along this line during our heated campaigns. And a later declaration from another source, that "Before we can hope for a United States Court decision upon trusts favorable to the masses at least one of the judges would have to be removed." This latter, I admit, is unaccompanied by the specific reasons upon which the opinion is based, and lacks the moral force the courage of conviction should add, so that we can hardly accord it as serious consideration as that of Mr. Cockran; but both give us food for very serious thought and reflection.

We find these admittedly evil conditions encumbering, in a greater or lesser degree, in the administrations of both parties, both in national and State government, and must conclude that they are not the result of party name or the declared purposes of their respective platforms, and, though we are prone to charge these evils to such sources, truth forces us to the conclusion that the evil we notice is but the result of anterior conditions, whose source must be discovered before we can prescribe a successful remedy.

EVERY INTELLIGENT AND FAIR MINDED CITIZEN

will admit that there are men of sufficient ability and moral courage in both parties, both in and out of politics, to judiciously administer our affairs of government, but by our indifference and political blindness to the mental and moral forces required to be a proper associate to the patriot and statesman we have encouraged and supported candidates to whom we would not entrust the management of our individual affairs for a single month. We have allowed our primaries to be controlled by the rum element of our communities until the very atmosphere is preventing too many good men from exercising their rights and privileges, and thus encouraged a purchasable political machinery which too often slates men contrary to the best interests of a community.

We have been without a single political idea until the day after our respective party conventions and then swore ourselves red in the face by every letter in their platforms as the true gospel and essence of political salvation, until the day after the election, and then settled down to a two or four years' course of blaspheming the very politics which, from an improper exercise of the rights and powers we possess, have become

CREATURES OF OUR OWN UNWISE CREATION.

Sent to legislate for a people without being properly imbued with ideas fertilized with the importance of common every day home needs, and the equities which should prevail under the letter and spirit of our peculiar American federation, and like stray hens, our curses are coming home to us with a hatch of mongrels perfumed with the odors of broken fruits added in the sunshine of an ever tolerant and unsuspecting public. I may take occasion to hold up to your view some of this added fruit, but before I pass on I want to ask you, do you recognize the cause of this infertility or the source of public disease? If you do then the remedy becomes self evident. Figuratively speaking, use the knife, and if its operation should sever the cords which bind us to an injurious fanaticism, and perchance open the fountains of moral force that will bring all of us to stand by our guns, then happily the first plan of operation in glorifying self government will have proven a success.

IN OUR GRANDFATHERS' DAYS

It may have been eminently proper to establish a legislative system based upon indefinite responsibilities and upon the surety of a gentleman, but the manner in which actual conditions in these days are forcing us to recognize that the unrestricted weakness of too many of our public men is making them an easy prey to the wiles and dreams of a moneyed aristocracy, that the parity of the dollar has become of greater importance to our politicians than the parity of the human qualities in the body politic, that the efficiency of the rights and powers of citizenship is becoming impaired by the powers of money, that our vote is made a farce by a system of political primaries, and that we are confronted with the dangers of our United States Supreme Court degenerating into a sixteenth century indulgency system, should arouse us to a sense of importance to begin to do a little thinking for ourselves.

OUT OF THESE EXIGENCIES

are growing the many economic and trades associations of our country, which may be viewed as possible forerunners of some manner of revolution in American legislation. In these associations the conservative, thinking element of all parties are discussing the economic questions of the day uninfluenced by the heat and fervor of political campaigns, and concentrating their forces through organized bodies which, if they mean anything,

mean that instead of the corrupt and selfish element of political parties dictating the limits upon which the masses may be allowed to exercise political rights, the masses will determine through the force of civic federation to become an important factor to be considered in the terms of the contract upon which they will cast their vote, or, in other words, a plainer business understanding between sovereign and servant regarding the service to be rendered.

DEPARTMENT STORES.

A great deal has been said and written upon the platonic nature of department and catalogue houses. I am in hearty accord with most of these views. Results, however, have demonstrated that the public has little interest in issues whose sole argument appears to be prompted by motives of self interest, and we have possibly been directing our efforts against the symptoms of a public disease while we should have applied the knife to the canker gnawing at the heart of our republic. If the propositions I am about to establish are true, which I believe they are, and will stand the test of every thinking man's moral convictions, then the responsibility of the evil does not rest alone with the men who are taking undue advantage of circumstances, but a considerable amount of it may be charged to the public blindness and indifference which unwisely creates or tolerates conditions under which either individuals or classes may take improper opportunities to so great an extent as to effect a decaying condition of the moral forces cementing our body politic, and its remedy will call for a more efficient degree of patriotism than that of firing bombs on Fourth of July, and occasionally cheering the mention of great men's names.

SIX PROPOSITIONS.

Here are six propositions upon which I base my views against department store systems:

1. The ruinous influence their underselling process has upon quality of manufacture is demonstrated during the past ten years in goods which are now but a semblance or shadow of their former quality.
2. The improper advantage they take, under lax laws, to ruin and drive out of market lines of goods by selling them as baits for less than cost of manufacture, until their commercial value is ruined and their manufacture must practically be discontinued.
3. The discouraging influence such actions have upon the higher ambition of mechanical minds to excel destroys an essence to which we must concede considerable importance as a factor in attaining our present commercial standard.
4. Their method of wrecking the small merchant's business by continually harassing him in unloading upon the market goods at less than cost and preying upon the ignorance of society to balance these losses through inferior qualities and corresponding advance of prices in other goods.
5. Their tendency toward changing the opportunities and privileges of independent support into a system of underpaid labor, a condition whose natural result enforces celibacy and encourages the accompanying crime of infanticide, thus establishing like conditions under which France is known to be fast falling into decay.
6. Their influence in establishing a standard of wages, which, from force of circumstances, must be followed by all kindred lines of retail trade, inadequate to respectably support the woman whose labor is her only support, and too often calls for virtue to be thrown into the scale to balance accounts. (Do not construe my remarks as alluding directly to employees of these establishments, I am dealing with the moral phase of the question.) I have the highest regard for any woman who has the courage to honestly make her own living whenever circumstances oblige it, and accord to her every honorable right to enter upon whatever calling her tastes and talents are suited for, whether it be a profession, a clerkship or a trade. If a railroad company has a switchman at some important crossing who is incapable or too dissipated to fill his position properly, and his wife or daughter can and will fill the place with greater safety to the public and more satisfactorily to the company, let her take the place, and as long as the act is without injury to the manager, it is of little importance to the public which one earns the bread for the family. But if her four daughters determine to enter the same calling, and from the sufficiency of living at home peddle their labor to the company at less than its worth and are hired by the company to supplant the four young men who should become husbands and heads of families, the scale established through the influence of an unwise act, which reduced the wages of the position to less than the requirements of decent family support, even if the four men could again get their places, puts marriage out of the question and demonstrates two social evils affected by the act—the one of influence wielded in

the wage scale upon all of the employees, and the other the enforcement of celibacy and its accompanying evils. The wag might ask why don't the four young men combine, marry the four girls, and control the market? and in the ordinary commercial sense has its weight. But marriage, we must admit, is not entirely based upon commercial method. First, the proper affinities might be lacking. Second, the question involves a condition of assurances from the society of which they are a component part that another four equally as rash women will not immediately apply for, and be placed in the positions, and leave the four couples to live and love by the wayside. So that the society assurance implied by the question rather assists us in establishing its importance as a political issue. I hope this is sufficiently plain to demonstrate the injuries inconsistency of labor produces for itself, by which no one profits but the rich, and from which, sooner or later, society at large will reap the moral effects. Advocates of these institutions assert that the conditions of female labor in these establishments is largely due to "girls of the reasonably well-to-do classes offering their services for whatever they can get as a little side money." This, however, would not mitigate nor excuse the evil influence of the act upon our social fabric, but, if true, simply adds enormity to the deed.

ANOTHER THEORY

Is often advocated, that the "demands of society inducing woman to dress beyond her means is largely responsible for these conditions." If this be true, and in a measure it may be so, yet taken as a whole I dispute the inference or conclusions to be deduced from such an allegation, and whatever the extent of her implication in the bringing about of these conditions, I am here to say, the spirit of American woman, which has ennobled her sex with deeds of patriotism and charity, by responding to the call of distress, whether from battlefield or nursery, from home or prison, from palace or slum, from midst the dangers of a Klondike or the fever infested Indies, and by her untiring missionary work proved so prime a factor in breaking the shackles of slavery from an unfortunate race, and under all circumstances has proved herself above any fear or limitation in the advancement of civilization, is a spirit above the guilt of intentional crime from which even the lowest might suffer. And if she has given moral aid and financial support by her patronage to so great an evil as the various phases of this condition implies, then she has done it through her ignorance of facts, for which you and I are responsible in failing to acquaint her with the bearings of the case. The great warfare the American woman has conducted, even under the most blighting ridicule of man, in fighting the evils of intemperance, and by her persistent devotion and social influence has done more to abate the evil than all the laws man's mind could devise, will not knowingly abet an economic evil which destroys woman's hope of a home from man's lack of means to support a family, and reduces her to a wage scale which too often enforces a crime against her soul, fills the street with young men without hope or a chance of useful occupation, and feeds the very flames against which she is directing her moral energy.

IF WOMAN MUST ENTER COMMERCIAL PURSUITS,

let her do so under the moral law she owes her fellow beings and let the survival of the fittest govern the situation. Let her see to it that she gets what her labor is worth, and let the public assist her by establishing social and political conditions or circumstances that will enforce it. Let society discountenance women of well to do circumstances peddling their labor for less than men should have for the same services and avoid establishing an unbalanced condition of labor from this source, and then do all else to patronize houses who pay a living wage scale, though they may not offer the bargains made possible by a commercial system which involves the hope of home and family, too often jeopardizes the soul, and is fostering an unwise and unjust heritage for our progeny. A great deal more might be said upon this moral phase, but I will pass it with the volumes contained in this sentiment: Less \$3 women; more \$15 men. Less millionaire merchants; more happy homes. Less demagogism; more politics from whose influences men and women will learn a higher appreciation of American patriotism. Dark as the clouds upon our political horizon may ever appear, let us bear in mind that beyond the clouds the sun shines bright as ever and will continue to shine until the end of time, and that the cloud in its blackest form is but a combination of elements in the course of nature's wise laws, and that the same laws which gathered them and limits their duration in harmony with their purpose likewise establishes the forces under which they fall into dissolution that all nature may rejoice in the purified atmosphere the process produces. Observe these laws and all will be well.

Secretary Reeves' Report.

Lewis M. Reeves of Peoria, secretary of the association, presented the following report:

In presenting this my first report to the second meeting of this association I wish first to thank the members, and especially our president, for their hearty co-operation and assistance in carrying out the work set before us at our last meeting. We have labored under difficulties, first, in not having had sufficient time as an organization to perfect a satisfactory working basis; secondly, the lack of sufficient funds, but I am glad that under these existing circumstances I can make as favorable report as I do.

HISTORY OF THE ASSOCIATION.

I shall in this report give a general outline of the history of this organization from its beginning to the present meeting.

The idea of the retail Hardware dealers of Illinois associating themselves in an organization, such as has been so successfully carried out in all the Middle and Northwestern States, originated in the Chicago Retail Hardware Dealers' Association early in the spring of 1899. Their Organization Committee, consisting of the late Ehler Goettsche and Fred Kurtz, labored hard and persistently in bringing together a few Hardware dealers of Illinois in obedience to their call, in Chicago on August 16, 17 and 18, 1899.

From every point of view the meeting was a success. The officary of the Chicago Association called the meeting to order, and the report of their Organization Committee was presented and received. The temporary officers of the meeting were selected in D. McLaughlin of Chicago for president, and O. L. Schulte of Freeport as secretary.

A committee of five was appointed to draft a constitution and by-laws, and their report, with amendments, was adopted. I wish here to state that our constitution and by-laws are not all they should be, and it is necessary that the same be revised, which has been set for a hearing later in this meeting.

Officers as prescribed by the constitution were then elected, a nominating committee having presented the several names to the convention, and their report was unanimously adopted, which was as follows: For president, Z. T. Miller of Bloomington; vice-president, D. McLaughlin, Chicago; secretary, L. M. Reeves, Peoria; treasurer, Theodor Krueger, Chicago; members of the Executive Committee other than the officers, D. D. Velde, Pekin; George Engelhardt, Chicago; Otto Schulte, Freeport; S. A. Crissey, Marengo, and E. Goettsche, Chicago.

An investigating or grievance committee was elected by ballot, which was to act in conjunction with the Executive Committee, and consisted of the following: Fred Kurtz, Chicago; F. E. Bonney, Paxton, and J. A. Hunter, Peoria.

A number of well prepared papers were read, among which were "Objects of the Association," by Ehler Goettsche, and "Opportunity" by Daniel Stern of the *American Artisan*. Also short talks were made by many of the members. F. C. Gillum, secretary of the Cook County Retail Dealers' Association, organized for the purpose of abolishing child labor and other evils the retail dealer has to contend with, addressed the convention at length and asked the co-operation of our association.

The three-day session was none too long for the amount of work that was accomplished and the few merchants who had assembled to organize an Illinois Association left full of the spirit of pushing the work that had been outlined for us and with the hope of seeing at this meeting an attendance much larger than had responded to the call of the Chicago Association to a first meeting.

MY WORK SINCE WE ADJOURNED

has been the mailing of over 1700 circular letters, prepared by President Miller, to the trade, asking them to

join our association and be in attendance at this meeting. Also, in order that we might revise our list of legitimate dealers of the State, that they mail a list of the dealers in their town to the secretary, but I am very sorry to have to add that of all the replies that were received but five or six contained the asked for list. Our list is not complete and we have the names of many who have been out of business for years.

Later I mailed 1700 postal cards, calling attention to the place and date of this meeting, with a wish that those who had planned to come would notify. The response was very satisfactory. About 300 letters have been written, a great many to merchants who were desirous of information regarding the association, and what they would gain by becoming members. These I have explained as well as possible, but the objects are so many that time would not permit to write at such length as I should have liked.

MEMBERSHIP.

There were enrolled at our first meeting 54 members, 32 from Chicago and 22 from the State. Since, we have enrolled as new members 3 from Chicago and 31 from the country, including 16 in the city of Peoria, which gives them a membership in this association of 19, or every retail merchant in the city. Total membership at this writing, 88.

From replies of those who have signified their intention to come here and enroll, the membership at our second meeting is all that we possibly could ask.

NATIONAL ASSOCIATION.

The plan of forming a national association has been ably carried out by our president, and the year 1900 should mark a new era in the business of the retail Hardware dealer.

SOME PLAN

of inducing every retail Hardware dealer in the State to become a member of this association should be adopted by this convention whereby we can abolish rivalry and enmity and fill in their places co-operation and friendship.

One of our members, Bagby Brothers of Tuscola, took upon themselves to send to the trade in their vicinity a personal letter, stating the objects of this association, and asking that they join with us at this meeting. The idea was a good one and each one of us should consider it his personal duty to induce all within reach to enroll.

GRIEVANCES.

There have been no grievances reported excepting one which the secretary himself had, and although no satisfactory settlement has been made, still there is no likelihood of a repetition of such an affair.

MESSRS. KRUEGER AND GOETTSCHKE.

The few months which have elapsed since we last met have been crushing ones to the association in that we have lost through death two of our most enthusiastic and earnest workers as well as officers. On December 4 Theodor Krueger, our treasurer, and on December 25, Ehler Goettsche, member of the Executive Committee, both of Chicago, passed to the great beyond.

To them we owe our existence, for through their untiring efforts the Illinois Retail Hardware Dealers' Association was born, and it is sad that they should be deprived of seeing it grow, gain strength and become a power. But their memory shall live as long as the work they began, and their names will ever be associated with this association.

After the death of Treasurer Krueger, President Miller appointed to fill the vacancy Geo. A. Engelhardt of Chicago, but the vacancy in the Executive Committee was left open.

Much credit should be given the several trade papers for the interest they have taken in our work, and the assistance they have given us.

In conclusion I will state that our first year has been a short one, and although our growth is in a way satisfactory, still it is not what it should be, for with the 2000 retail dealers in Illinois there should be at least 50

per cent. who take enough interest in their business to associate themselves in such an organization as this for their own protection, and a little argument will soon convince.

Treasurer's Report.

Treasurer George A. Engelhardt of Chicago read his report, showing receipts of \$227; payments, \$179.59; balance, \$47.41.

Auditing Committee.

The president appointed as Auditing Committee, W. J. Krueger of Chicago, William Bittel of Peoria and D. D. Velde of Pekin, to whom the secretary's and treasurer's reports were referred.

Grievance Committee.

Frederick Kurtz, chairman of the Grievance Committee, reported no grievances under consideration.

Committee on Nominations.

The president appointed the following Committee on Nominations: James A. Hunter of Peoria, G. R. Lott of Chicago, G. S. McCurdy of Bloomington, W. B. Costello of Chicago and F. E. Bonney of Paxton.

On Resolutions

he appointed G. R. Lott of Chicago, Lawrence Babst of Kankakee, H. E. Wadsworth of Jacksonville, H. G. Cormack of Centralia and R. H. Griffith of Rushville.

The following paper was then read by F. E. Bonney of Paxton:

Do Mercantile Interests Demand a Change in Our Monetary System?

In accepting the topic assigned to me on the prepared programme for this meeting, I did it with the understanding that I was not to go into any extended discussion of the monetary systems or to outline or specify any new system, which should replace the present one, should I answer the query propounded in the affirmative.

All I am expected to do is to bring out such points as will start a general discussion and leave the final answer to the question to your tender mercy, and may the shades of those who have wrestled with this question in the past protect and preserve you, when this discussion is once fairly started.

THE SUBJECT OF FINANCIAL SYSTEMS

is enough to give the average layman when he attempts to discuss it what a celebrated French writer described as "a sort of intellectual vertigo."

It is easy enough to take any one position and argue for or against it, but to arrive at conclusions in the face of widely different views and beliefs now prevalent is no easy matter.

MERCANTILE INTERESTS

undoubtedly demand many changes. Were we all perfectly satisfied with existing conditions we should not be here to-day spending our time in discussion and investigation, but home behind our counters looking after change entirely different from that here contemplated.

We want all the change that is honestly ours. We want interest when it is legally our due. We want to make more money than many of us here have been making, and we want more system in everything we do.

A study of the aims and objects and topics of discussion of the various mercantile organizations throughout the land emphasizes the needs and demands for changes in the business world.

We need better organization. We need less ruinous competition. We need a better system of freight classification and charges. These needs and others are growing with our growth and are forcing themselves to our attention with the pressing and important changes in our economic conditions.

Even the suggestion of the topic which your committee has assigned to me is evidence that somewhere there is some one who at least questions the perfection of our present financial system and is feeling the need of something better, or, at least, something different.

Have we, therefore, reached a point in our commercial progress where the mercantile interests demand

A CHANGE IN OUR MONETARY SYSTEM?

The question is asked me, and demand is a pretty strong word, but I shall reply in the affirmative. As to what the exact changes shall be, or as to how they are to be effected, I am, fortunately, not asked to state. As I have answered the question propounded to me, you

have the privilege of asking why I have taken the affirmative.

I reply, we want something better, and here, I believe, I will be seconded by you all, irrespective of political faith or financial school. This is a question upon which I find few, if any, business men who are content to let well enough alone. We know the old proverb says that "Changes are lightsome and fules are fond of them," and that immortal Shakespeare has told us that "It is better to bear the ills we have than fly to others we know not of."

But neither the writer of the good old proverb nor the immortal bard were ever called upon to face the crowding problems of this age of steam and electricity, of trusts and combinations and of world wide exchanges and transfers.

CHANGES DEMANDED.

You may ask what changes for the better, I believe, are demanded, and I will name a few.

First: A greater stability and permanency. A system whereby the money question is taken as far as possible out of party politics and placed where the changes of parties or the needs or acts of speculators cannot affect it.

WE WANT A DOLLAR

that will not hide at the sight of a Democrat or Populist, or risk its life in gyrations and leaps of joy when a Republican passes by. A dollar that will not seek the cellar when a Gould dies, or the housetops when a Vanderbilt is born. A dollar that is just as comfortable and contented and just as much at home in the hod carrier's pocket as in the millionaire's safety deposit vault. A good, common, every day, every year, every century dollar, that is not afraid to travel by night or by day, and that does not require a life preserver when it crosses the seas, or need a hypodermic injection to brace up its nerves when it meets the dollar of any other nation. A dollar that is good wherever the ebb and flow of the great ocean of commerce may land it. A dollar whose value is never for an instant questioned by Democrat or Republican, by friend or foe, and which is honest and clean and true by the judgment of man and the laws of the most high.

I don't care what its material, color or weight, so it fulfills the tests enumerated.

Oliver Cromwell, when shown some silver statues in the niches of a chapel, inquired, "What are these?" "The Twelve Apostles," replied the trembling dean. "Take them down," said Cromwell, "and coin them into money, that they may go about doing good." He doubtless would have said the same had they been of gold.

Second: A system with sufficient elasticity to meet the varying needs of time and place and condition. A system that will expand, if necessary, in the cold of December and contract, if required, in the heat of July. A system that will reach out into the villages and hamlets and touch the pockets of the cross roads merchant and trader in his time of need, that will draw away from the great centers when its great plethora would be a menace and a temptation.

A system that will rise when necessary and float the ship of trade off the sands and rocks of financial stringency and again subside when the lead line and plummet cannot take the soundings.

A system that will readily, effectively and safely adapt itself to the needs of the business world without endangering the safety of a single honest man or tempting too much the cupidity of the class that is too speculatively inclined.

A system that will not swing us back and forth between periods of panic, when money seeks the stockings, the tea pots and the caves, and times of plethora and speculation, when the most reckless and harebrained can get it for the asking.

Third: We want a system whereby in times of great or unforeseen danger, or of great crisis, the power to take saving action shall be in the hands of one man or one small group of men, instead of being left to the action of a long winded Senate or a divided House of Representatives, who will continue for days and weeks and perhaps months to agitate the air of the halls of Congress, while the business world famishes and the merchant, the banker and the farmer fall by the wayside for the need of what might have been given them by a few strokes of a pen or two days' careful study and decision.

Fourth: A system that is safeguarded by the people, that has their confidence and that is never, for a moment, out of their ultimate control and into the hands of a class that will or can use it for their personal gain or achievement. A system of the people, for the people and by the people.

You may say I have outlined a system that is ideal but not practical. I beg to remind you that frequently the ideals of yesterday are the reals of to-day. Why, then, may not the ideals of to-day be the reals of to-morrow?

We are business men with business aims and business wants. These aims and wants are best understood by business men.

PUT BUSINESS MEN IN LEGISLATURES.

If we want a better monetary system for business needs why not elect some business men to our legislative assemblies, who will study how best to give us what we need, instead of how to best lay some wires, the proper manipulation of which will return and keep them and their parasites at the public crib.

We have done this in many cases, but we have not done it extensively enough.

I have tried to give you some food for thought and discussion, as requested, and my last hope is that you will not exclaim with Prince Henry, "O, Monstrous! But one half penny worth of bread to this intolerable deal of sack."

Convention Programme Revised.

A motion was adopted to revise convention programme so as to conclude business of convention on Wednesday afternoon. The convention then adjourned until Wednesday morning.

TUESDAY EVENING.

The local Hardware interests, including manufacturers and jobbers, provided as part of the entertainment of their visitors free admission to a theatrical performance on Tuesday evening, which proved highly enjoyable.

WEDNESDAY MORNING SESSION.

The convention assembled Wednesday morning, with the attendance swelled considerably by fresh arrivals. This session was restricted to members only, but representatives of the trade press were courteously invited to be present. Papers were read on local organization by W. J. Krueger of Chicago, and Wm. Bittel of Peoria. An interesting discussion followed, which was participated in by many of the members, who brought out valuable points in their experience. The interchange of ideas was most refreshing and highly profitable.

AFTERNOON SESSION

At the afternoon session a paper will be read by Geo. A. Engelhardt of Chicago, and a memorial address touching on the late Theo. Krueger and Ehler Goettsche, who were conspicuous in the formation of the association, delivered by W. B. Costello of Chicago.

Election of officers, reports of committees and selection of next place of meeting will also be features of the afternoon's work. Indications point to the re-election of the present able corps of officers.

The evening will be devoted to a banquet at the Fey Hotel, for which elaborate preparations have been made.

Few, if any, of the retail Hardware conventions held this year have been more satisfactory in every respect than that of the Illinois association. The officers were specially fitted for the discharge of their duties, the convention was run on businesslike lines and the discussions were exceptionally able. The opinion was enthusiastically expressed on every side that many of the speeches were alone worth traveling to Peoria to hear.

Sixth Annual Sportsmen's Show.

THE sixth annual sportsmen's show, under the auspices of the National Sportsmen's Association, will take place at Madison Square Garden, New York, beginning Thursday evening, March 1, and (Sundays excepted) will be open to the public every day and evening until March 17, inclusive.

All the available space in the balcony and galleries suitable for trade exhibits has been taken, it having been necessary to refuse additional space to exhibitors who later desired to enlarge their displays.

The amphitheater of the Garden will be used for exhibits designed to show the resources of the country from Maine to California in game, fowl, fish, &c. There will be races and contests, in which amateur and professional athletes can enter, with prizes for the successful ones. The management refer to this exhibit as the most effective of the series.

Ohio Hardware Association

SIXTH ANNUAL CONVENTION.

THE delegates began gathering on Tuesday, when more than 100 of them were here, notwithstanding the fact that the convention did not begin its sessions until this (Wednesday) afternoon. The morning trains, however, brought in many members and also a considerable number of merchants, who are interested in the association work and will doubtless become identified with it.

Cleveland Hospitality.

The Entertainment Committee, under the efficient chairmanship of Mr. Van Wagoner, have made arrangements to give the association a most hearty reception and to render the meeting as successful and enjoyable as possible.

The W. Bingham Company have a suite of rooms which are arranged for the comfort and meeting of the trade, with facilities for correspondence, &c., to make use of which a cordial invitation is extended to the visitors.

This interest on the part of the jobbers and manufacturers of the city is much appreciated by the members.

Exhibits.

Several exhibits are made by the manufacturers and jobbers, whose representatives are on hand to extend courtesies to the merchants. Hibbard, Spencer, Bartlett & Co. of Chicago are showing a large line of Sporting and Athletic Goods and some specialties which attract a good deal of attention from the trade. The Taylor & Boggis Foundry Company, Michigan Stove Company, Allerton, Clark & Co., and E. C. Atkins & Co. are also thus represented.

Executive Committee.

A fully attended meeting of the Executive Committee was held in the forenoon, when plans for the convention were matured.

Opening Session.

The convention, which met in the Cleveland Chamber of Commerce, was called to order promptly by President Wiseman, who was greeted by a large and enthusiastic company of merchants and representatives of trade interested in the convention.

President's Address.

The annual address of President Wiseman was as follows:

In glancing over this splendid body of business men gathered, as it is, from nearly every county of our State, representative as it is of our very best business interests, I am constrained to say, as is so often said by public speakers, "The Ohio man is in evidence." Surely such solid increase in our membership is cause for congratulation, and certain it is that nowhere else in this broad land, under similar circumstances, and gathered for like purposes, would it be possible to bring together so many men of one interest in a common cause of betterment, of pleasure and profit for all.

We have cause for congratulation, too, in that

THE CITY OF OUR MEETING

perhaps as no other city in our country, has gathered within its walls a chain of Hardware interests—in manufacture, in merchandising, in distribution, in the men at the head of its interests—whose every link is forged and welded for the good of its makers, the good of its people, and that of the country at large, until to-day it ranks as the great Hardware center of the West. We are particularly fortunate in holding this the sixth and largest of our annual meetings in a city so closely allied to all our interests.

It is a pleasure to greet you here, and I do it right heartily and with the feeling, as your retiring officer, that my cup is well filled in having the largest and last of our meetings for the best.

THE ANNUAL ADDRESS

has some recognized lines, as to the past, present and future of the association, from which I want to depart

in so far only as to considering the ever present. At our Toledo meeting, and during the initial portion of the address, it was suggested to me by the query, "Why are we here, Mr. President?" and has rang in my ears ever since as a pertinent subject for the meeting of 1900, and so if you will bear with me, I will tax you for but a short time, and as best I can, as to

WHY WE ARE HERE.

There are with us to-day, filling this beautiful Chamber of Commerce room, some 500 to 600 members of this association, brought here by the feeling that in Union there is Strength—brought here by the desire to meet and greet, and know their fellow Hardwaremen. Many for the first time are here in business interests and for the discussion of business subjects, here for the final binding into one strengthening cord of every dealer in our State; here to know personally and shake by the hand men who have been their neighbors all these years in name only.

The recollection of the speaker's first attendance at a Hardware convention stands out in black and white, in that, after 20 years of business in a central city of our State, every man who should have been his neighbor was a stranger.

IF THERE WERE NO OTHER RESULTS

than the friendships made to look forward to, and those of the past few years were the summing up of our meetings, they were worth it all an hundred times. The knowing and associating with the best class of business men our State affords is of itself full of pleasure and profit—is elevating and educating and not soon to be forgotten.

We are here, too, to sink the trifling wrongs of the individual in the greater good that may come to the many. Did we bring with us the small annoyances that are the bane of our everyday life, then would the pleasure and the profit soon pass away.

THERE ARE REAL WRONGS,

the correction of which we are here to discuss, and to seek, and in the correction of which we are all interested alike.

There are the peddlers who haunt our streets, with license or without.

There are fraudulent advertisers who gather the dollars from the world as a field that should come to the legitimate tradesman. Lien laws are badly needed, of which our statutes have none worthy the name. We have excess express rates with us, and the department and 5 and 10 cent store always and on all sides.

The proposed Postal Parcel System may possibly prove to be a trade issue.

With the co-operative influence of State associations all these things may some time come to our doors properly corrected.

WE HAVE RESULTS NOW

worthy our notice. Previous to the existence of our State association, so far as known, there was not within its borders a local one. Their growth has not been rapid, but there have followed a number. Columbus has one, and a flourishing one, so has Cleveland. Akron has one, as has Lima, and there are others. We can trace to some of these the six o'clock closing movement, which should hold in every city in the State. To all of them can be traced a betterment in prices, a higher degree of respect and friendliness one firm for the other, and the self-respect that comes of doing business along harmonious lines.

Better work is shown among employees where early closing is the rule. They are appreciative—they are interested in our association and its meetings. It is unfortunate that we are so situated as to preclude the possibility of their attendance.

MANY NEW ASSOCIATIONS

are forming as a result of our being here, and of our having been the pioneer among them. That they are for good is in evidence when I make the statement that our initial year had but a membership of an unlucky 13, that at Toledo last year we added 200 new members. We bid fair to add more than the additional 200 during this year and on leaving Cleveland—giving us a membership of over 500.

Why we are here is answered in language stronger than any I might emphasize, when, in looking over this splendid body of men, we recognize them as the pushing, enterprising, representative, brainy business men of the State—men who are here for the good of the cause, for each other's good and their own, for the better understanding of the trade problems which confront us in our everyday life.

WE ARE BUILDING FOR OTHERS

as well as for ourselves. Our clerks, and those under us, the sons of to-day, will be the Hardware merchants of

the future. The heritage is theirs, and for many of us their coming into it may not be many years away. By our example we are to give them the best we have, and I believe it will come as nearly and directly through the medium of our State Hardware Association as in any other way. If they make any strengthening friendships, if they help to take away and heal the rankling wounds of never ceasing traffic, if we are better citizens because of their influence, then will it have been well that we are here to-day.

THE ELEVATION OF THE HARDWARE MERCHANT

is a subject one almost feels like resenting, for the reason that, while perhaps not complete, he stands head and shoulders above the many other lines of trade. Of a necessity, it is a good man who masters the business—he is a good man when it does not master him. There are professions—there are scientists and experts—and yet he who thoroughly understands Hardware has gone through more than these. He is never without a position, and it is this sort of men the average dealer is putting through their paces to-day, that they may follow us as able men hereafter.

The years to come will show the results of our work here, in what we do, what we accomplish toward the betterment of trade, in the confining of the business to its proper channels, the manufacturer as the producer, the jobber as the distributor, and the retailer as the purveyor to the consumer.

BUSINESS CONDITIONS DIFFER TO-DAY

from those to which we have been accustomed. In combination of capital, in monster stock aggregations, in the control of one man over many, in what are properly called the trusts, we have more serious problems than we have ever known. We are to ask ourselves if they have come to stay. We do not know as yet whether or no they are to prove a blessing or a curse, whether their influence be for good or for evil. In the good times of the past year probably many of us have lost sight of what may be in store for us later. The business world stands still in amazement at the rows of figures included in their capitalization. The Hardware merchant, perhaps more than any other one class, has felt the influence so far of these corporations, and the Hardware merchant, more than any other, would suffer should they prove a curse. We can only consider and wait.

THE TRAVELING SALESMAN

is with us to-day, as he is with us most of the time. We are here to let him know that this association and all others are under lasting obligations to him for his kindly efforts in our behalf. He is an organizer, he carries the application blanks in his pocket, and under any and all conditions has been a large factor in the growth of the Ohio Hardware Association. No one man or class of men has given us more or better service in its building up. It behooves every member of this organization to bind in closer bonds of friendship his relation with the traveling salesman. A just tribute to him is that he is every man's friend and a gentleman. The many favors that come to us through him are, no doubt, at times seemingly unappreciated, yet he it is who favors us with pointers as to prices and advances, advice as to where and when, in buying certain lines of goods, and the hundred and one contributions to our fund of information.

THE ABSENT MEMBER—

he who in departing leaves footprints on the sands of time that we may follow—we have but one to mourn from the active life of this association, and that one a father in truth and in deed, a man whom to know was to love, a man whose sympathies and help were for the younger man; one who has, perhaps, started more young men in business life than any member with us. Some of them are with us to-day, and will bear witness to his kindness, his high sense of honor, his Christian character. The memory of our friend, W. V. Marquis, will always be with us.

THOSE WHO SERVE US

so faithfully throughout the year, we are here to remember, and first and foremost among all there is our worthy and long suffering secretary-treasurer, John F. Baker, of Dayton, Ohio, whose many years of service have been so freely given toward the upbuilding of this association, whose time is always at our beck and call, and whose work the past year has been worthy of more help than we have been able to give him. To him and to

OUR EXECUTIVE COMMITTEE

we owe much of our high standing among State associations, and it is my earnest hope that when all the States of our Union shall have formed State associations, we shall then, too, stand first among them in all things that are for the good of organization. With such men

as are now of its membership, men whom we can call on in season and out of it, men who love the association, this is possible.

THE CLOSING HOUR

of my honored position as your president is at hand. It has been a great pleasure to work with you—to know of your support in all those things that are for the good of our cause. To him who shall follow me this same support will be more than necessary, and for him I bespeak our earnest and sincere friendship, and the best help we can possibly give him. Gentlemen, I thank you.

Secretary Baker's Report.

The report of John F. Baker, secretary, was as follows:

In presenting to you my fourth annual report I take great pleasure in giving you first some information regarding the growth of our association.

At the close of the session of 1895 we numbered 16 members; session of 1896, 36 members; session of 1897, 60 members; session of 1898, 107 members; session of 1899, 221 members, and at the opening of the present session, 273 members. In one of his former reports the secretary made use of these words: "I have reason to believe from the correspondence I have had with dealers that our growth will be slow but sure, and that at no distant day we will be one of the largest, if not the largest association in the Union."

MEMBERSHIP.

When we reflect that our membership is confined only to Hardware dealers, and that we do not combine, as some other States do, the Stove and Agricultural Implement interests, then it will be seen that we have undoubtedly at this time the strongest association in our country.

That this increase in our membership is gratifying is true, and more especially so to those of us who have been identified with the organization from its beginning. We have had faith in its future and efficiency that has never wavered, and now that it has reached its present strength ask you to unite with us in the gratification we feel as we contemplate our numbers and our prospects.

THE PAST YEAR

has been one of activity on the part of the officers as well as the members of our association. New names have come to us at various periods of the year, showing that the members were energetic and efficient in missionary work. The members of our Executive Committee have been especially active and to them we must attribute much of the success that has come to us.

THE CORRESPONDENCE

relating to the work of the association has been the largest in its history, and has been confined not to our own State alone, but to the trade throughout the Union. Never before in the recollection of the secretary has he been in receipt of so many inquiries regarding the aims, benefits and possibilities of the association as during the past year, and while to many of his replies no further correspondence ensued, yet surely the fact that the information was desired gives evidence that there is a spirit of inquiry abroad and that the association idea is investing the minds of the dealers in the land.

COMPLAINTS.

During the past year the complaints filed with the secretary numbered 18. These complaints were made against certain jobbers and manufacturers by the members of our association who objected to the selling of goods direct to the consumer. Of these 18 complaints but two remain at this time to be adjusted, these having come to the secretary just prior to this meeting. The correspondence relating to these complaints is on file with the secretary, but is so voluminous that the reading of it would occupy the entire session of one day. In the majority of them the trouble was quickly adjusted, but in some cases the grievances were not so readily disposed of, but involved a correspondence that occupied the attention of the secretary as well as the offender for a considerable portion of time. While in some instances the parties offending were at first inclined to be indifferent to the complaint, yet the secretary succeeded in every instance in establishing the justice of the claim, defending the rights of the members, and also succeeding in getting from the offender the promise, implied or direct, to refrain from the selling of goods to the consumer.

IT HAS BEEN THE POLICY OF THE SECRETARY

to so adjust these matters as that neither jobber, manufacturer nor retailer might be aggrieved, or that the friendly relations between them should discontinue or be severed, but on the contrary that a spirit of forbearance

and confidence might always obtain, and, while it was the policy at all times to be courteous and conciliatory, yet he has always insisted that the principles of the association should not be lost sight of or forgotten, but that they should be maintained, since they were just and proper and right.

In several instances the member filing the complaint suggested that vigorous measures be employed in bringing the offender to terms, but at this point the secretary is prompted to say that he does not believe that the end desired can be obtained in using language harsh and irritating, but that pursuing the course he has adopted has resulted in placing the Ohio Hardware Association before the people as an organization which seeks to remedy some of the evils that are threatening us, but to do it in a way that friendly relations may prevail at all times between its members and those who are not or cannot be numbered among us.

COMPLAINTS SHOULD BE JUST AND RIGHT.

In concluding this part of my report I desire to suggest that any member making a complaint should first see that it is well grounded, that it is just and right, and that it is not based on ill will or a desire to "get even" with any jobber or manufacturer for some fancied wrong. The secretary now calls to mind an instance in which a complaint was made against the wrong firm, requiring the exercise of all the ingenuity he possessed to withdraw the charge and do it gracefully.

Since our last meeting death has taken from us a former member, W. V. Marquis of Bellefontaine. Notwithstanding the fact that Mr. Marquis had severed his connection with the Marquis Hardware Company, he took a lively interest in the welfare of our association and expected to be with us during this session.

During the year we received from the Southern Jobbers' Association a record book to be used at our annual session, for the purpose of registering the names of our members as well as our visitors. We suggest that our members make free use of it and in the days to come it will possess an interest that will be of inestimable value.

EXECUTIVE COMMITTEE.

On or about the middle of November the Executive Committee held a meeting at the Colonial Hotel, in this city, to make arrangements for the coming session. As indicative of the interest manifested all were present but one, who was unavoidably detained at home. A programme was arranged and the work outlined, and if our session now being held be a success the credit should go to the Executive Committee.

INFLUENCE OF THE ASSOCIATION.

The annual report of your secretary does not include all that might be said, but which by reason of its volume must be omitted, inasmuch as some 800 letters have been written during the year, but he desires to say that the influence of our association is slowly but surely being felt among the dealers of the State. Numerous local organizations have found their origin in our own association, and dealers who were known to be exclusive or antagonistic have come to our meeting and under its beneficent influence have become social and friendly, the result being in later days to join each other in some sort of an alliance for the betterment of trade, the unification of prices, and that other benefit which invariably follows—an increase of profits.

In conclusion, the secretary begs to extend his sincere thanks, first, to our president, who has been to him throughout the year a tower of strength, and also to the Executive Committee for words of encouragement and for valuable assistance at times when it was needed most, and, finally, to the members, for the kindly letters he has received from them regarding the work of our association.

A National Retail Hardware Association

IN the call for a national conference of representatives of retail Hardware dealers' associations, which was published in our last issue, reference was made to a possible change of date of gathering. We are, however, advised that no change has been made, and the conference will be held at the Sherman House, Chicago, as announced, on March 12.

In the report of the annual meeting of the New England Hardware Dealers' Association, which appeared in our issue of last week, there was a mistake made in the name of the principal speaker, which should have been William Chamberlain of Emery, Waterhouse & Co., Portland, Maine, instead of William E. Chamberlin, as given.

North Dakota Retail Hardware Association.

THE third annual meeting of the North Dakota Retail Hardware Association was held in the city of Fargo on Wednesday and Thursday, February 21 and 22, and it was certainly the most enthusiastic and successful meeting yet held by the association, which now numbers in its membership nearly all of the regular Hardware dealers of the State.

The convention was called to order by Vice-President H. B. Allen of Jamestown, owing to the enforced absence of President Clark W. Kelley of Devil's Lake, who was too ill to attend the meeting. Mr. Allen thanked the members for the large attendance at the opening session and introduced Mayor Johnson, who very pleasantly welcomed the members of the association to the city of Fargo. A huge tin key, which the Mayor assured the members was manufactured by Hubert Harrington, a prominent local dealer, was then turned over to the association, Mayor Johnson assuring the members that it would fit every lock in the city, from the police station to the churches.

In responding to the welcome of Mayor Johnson, Vice-President Allen took occasion to congratulate the citizens of Fargo on account of the rapid and steady growth of the leading city of the State, assuring them that the State at large took as much pride in the growth of the city as did those who resided within the corporate limits of the city.

Thomas McCracken of Minneapolis, secretary of the Northwestern Retail Hardware Association, sent the following telegram to Secretary Barnes, which was read:

Minnesota sends you this greeting—the glad hand of fellowship. Shake, for united action, for fidelity to our association principles, for good cheer among you, and for an enjoyable meeting.

On motion a recess was taken to give the vice-president an opportunity to appoint the several committees. The appointments were as follows:

Committees.

Press—H. F. Strehlow, Casselton; C. L. Richmond, Minnewaukan; O. E. Lofthus, Hillsboro.

Transportation—H. Harrington, Fargo; S. A. Wroolie, Milton; O. T. Ellestad, Grand Forks.

Nominations—H. N. Joy, Hamilton; W. Westergaard, Valley City; I. L. Newgaard, Grafton; W. R. McIntosh, Bottineau; W. A. Fox, Ardoch.

Resolutions—G. H. Wolbert, Casselton; S. D. Bostwick, Bathgate; M. T. Thomson, Bowesmont.

Membership of the Association.

Wm. Schuner, Fingal.
J. F. Jaberg, Sanborn.
Mason Bros., Valley City.
Heidel & Mason, Valley City.
Wm. J. Westergaard, Valley City.
Moore Bros., Wembleton.
McIntosh Bros., Bottineau.
Ferguson Bros., Bottineau.
C. D. Milloy, Omamee.
Adelard Tanguay, Willow City.
Thomas & Olmstad, Willow City.
Grambs Bros., Bismarck.
C. L. Richmond & Son, Minnewaukan.
W. Merriell, Buffalo.
Casselton Hardware Company, Casselton.
H. F. Strehlow, Casselton.
M. G. Myher & Son, Davenport.
Qually & Schneider, Davenport.
Hubert Harrington, Fargo.
Fargo Hardware Company, Fargo.
Pritchard & Houstain, Fargo.
Cooper & Cook, Gardner.
Gale & Duffany, Hunter.
Barber & Gamble, Hunter.
Heffron & Vourhees, Tower City.
Adams Bros., Hannah.
W. Catherwood, Hannah.
Plummer & McNiven, Langdon.

E. C. Dedrick, Langdon.
H. T. Helgesen, Milton.
Johnson & Wroolie, Milton.
Bidlake & Kinchin, Osnabrock.
John M. Mulvey, New Rockford.
Thos. Doughty, Carrington.
R. E. Walker, Carrington.
Oleson & Walhus, Sheyenne.
Mallory Bros., Emerado.
C. A. Reihnhart, Grand Forks.
Redwing & Ellestad, Grand Forks.
Barnes & Nuss Company, Grand Forks.
McConnachie & Co., Inkster.
Albert Sorg, Inkster.
Larmour Bros., Larimore.
F. M. Middleton, Manvel.
Nick Halverson, Northwood.
P. S. Evanson, Northwood.
Peter E. Nelson, Cooperstown.
Anton Enger, Cooperstown.
O. A. Gallup, Edgely.
H. S. Diesem, LaMoure.
Jas. Kneen, LaMoure.
C. A. Heegaard, Mandan.
Halverson & Paulson, Aneta.
W. E. Smith, Aneta.
W. H. Pinkerton, Lakota.
L. C. Scott & Co., Lakota.
S. D. Bostwick, Bathgate.
Thompson Bros., Bowesmont.
Adams Bros., Cavalier.
J. E. Truemner, Cavalier.
Joy, Armstrong & Co., Glasston.
H. N. Joy, Hamilton.
Nech Hardware & Fur Company, Neche.
W. J. Briden, Neche.
McConnachie Bros., Walhalla.
Nels Eide & Co., Rugby.
H. A. Moe, Churches Ferry.
McLeod & Kavanaugh, Crary.
Clark W. Kelley, Devil's Lake.
W. D. Miller, Grand Harbor.
Henry Rathje, Enderlin.
Mott & Marsh, Lisbon.
Charles Penn, Sheldon.
Hanson & Evenson, Sheldon.
O. H. Rund, Christine.
John B. Wagner, Lidgerwood.
H. L. Eastman, Wahpeton.
W. W. Jamieson, Wahpeton.
Jas. O'Loughlin, Rolla.
B. T. Peters, Cogswell.
Ole Hansen, Milnor.
Frank Lish, Dickinson.
McCloy & Senour, Dickinson.
Latimer & Long, Finley.
J. H. McCollum, Hope.
Kirk & Allen, Jamestown.
Gieseler, Blewett & Co., Jamestown.
Hunter Bros., Cando.
O. A. Hong & Co., Buxton.
Buxton Hardware Company, Buxton.
J. P. Clark, Caledonia.
O. I. Butler, Clifford.
John Munro, Cummings.
Colton & Kloster, Hatton.
C. J. Mastrud, Hatton.
C. F. Jacob, Hillsboro.
Arnegard & Lofthus, Hillsboro.
Theo. E. Ostlund, Hillsboro.
Fox & Hill, Ardoch.
R. A. Wayrunek, Conway.
J. B. Buck, Edinburg.
Newgaard & Flaten, Grafton.
N. Upham, Grafton.
M. A. Hewitt, Hoople.
Loftus, Bannerman & Booth, Park River.
F. P. Rennreich & Son, Pisek.
M. Jacobson, Minot.
C. Jacobson & Co., Minot.

The Absence of President Kelley

precluded a report from the head of the association, but the following letter from him was read:

As the time for our annual meeting approaches I feel that my attendance is a duty which I owe to the association and myself, and I fully intended being with you

at this time, but under the circumstances my absence is necessitated by the condition of my health. I have enjoyed the work as president of our organization and appreciate the honor you have bestowed upon me. Since being president the time I could devote to the cause has been more limited than I wished. Still I endeavored to work for the advancement of our best interests.

The report of our secretary will give you all the details of our last year's work, so that it will be unnecessary for me to take that up at this time. I feel that we have progressed, and that the coming year will show a much greater advancement in our cause. The States all over the Union are organizing, and in another year they will be ready for a national organization of retail Hardware dealers, and when that has been accomplished we will be very near the end for which we have been working.

Although I am now ineligible to membership and cannot identify myself with you directly, my interest in the association will be as strong as it has been in the past, and I shall watch with great pleasure your continued growth and prosperity.

The Secretary's Report.

Secretary Barnes of Grand Forks then read his annual report, which also embodied all that would have been contained in the report of the president. It was an exhaustive document and contained much useful and in-



H. T. HELGESEN, President.

teresting information, showing the growth of the North Dakota Association. The report was as follows:

I am permitted for the third time to submit to you an outline of the work performed in your secretary's office during the past year, and on account of the illness of President Kelley detaining him from this meeting, will enter into more detail in this report than I otherwise would.

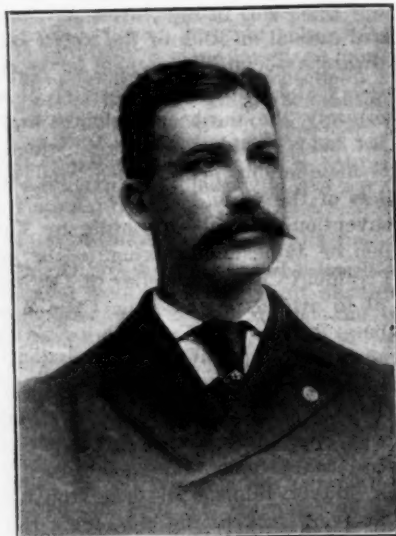
The last year has been one to most of us entirely new in its trade conditions, and one where many perplexing problems have been presented, but I trust it has been one that may be remembered as both pleasant and profitable to you.

REFUNDS FROM RAILROADS.

My first work after the adjournment of our last annual meeting, February 15, was to take up with the railroads the matter of refunds to those in attendance, holding certificates, and who were compelled to pay regular fare home, on account of many coming to the meeting without obtaining certificates from starting point, and leaving us with less than the required number to obtain reduced rates home. However, after the circumstances were explained to the roads, they cheerfully granted us our requests, and I have every reason to believe that all those who held certificates have received their proper refund.

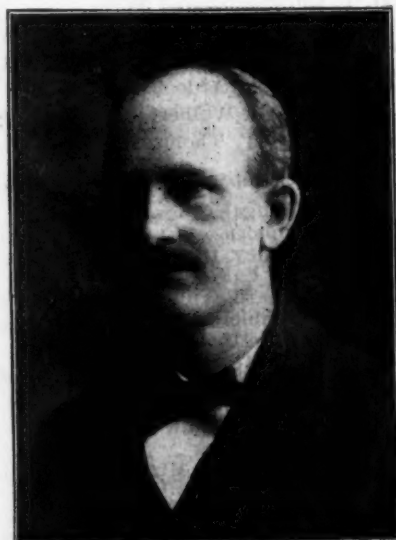
DIARY OF CIRCULAR LETTER CORRESPONDENCE WITH MEMBERS AND DEALERS IN STATE.

February 20 I addressed a circular letter to all Hardware dealers in the State who were not members of our association, calling their attention to advantages in their



H. N. JOY, Treasurer.

joining, and urging them to join us. February 28 I addressed a letter to all members to ascertain if they still had their pink list, with all change sheets, and tried to impress upon them the necessity of making it their guide in buying goods. In this letter I called their attention to the unprincipled manner adopted by a certain salesman representing a manufacturing Tinware and Steel Range house, who are unfavorable to our work. He was making the trade, and to effect business from members of the association was showing fictitious orders for his goods from officials and members of the association. In this letter I also drew their attention to the fact that the treasurer could use to advantage unpaid dues. At our last annual meeting Mr. Helgeson read a paper which was considered by those in attendance a very interesting and instructive one, and through the advice of the Executive Committee I had 1000



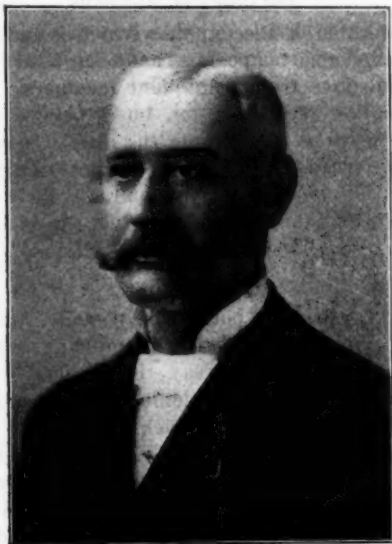
C. N. BARNES, Secretary.

copies put in pamphlet form for distribution. On March 9 I addressed our members and sent them several copies to distribute to those to whom they would be most interesting. April 3 I again wrote all dealers not yet members urging them to join the association, and also under same date wrote all members that I desired to have

them notify me promptly of any matters coming to their attention that they considered should be taken up in our work and tried to impress upon them that there were no doubt many things existing throughout the State that would be to the advantage for the association to take up, but the officers were unable to do anything without information. This letter called their attention to an agreement made by members at the annual meeting to use all their influence to secure new members. I inclosed list of stores that had been decided by our association as detrimental in our State, and asked that they notify me promptly of any shipment to them. I brought forth the necessity of using pink list as a guide for purchasers, and inclosed bill in same letter to all members that were delinquent.

August 1 a letter was sent to all members notifying them that there would be a meeting of the Executive Committee within a short time, and asking that they advise me of any matters which they wished brought up before that meeting in the line of complaint of any description or suggestions they wished presented. To this letter there was but one reply received, in effect that the member had nothing to offer. On the same date as fore-

answered the two former letters asking that they reply to same. January 18 I wrote our members and inclosed lists of all Hardware dealers in their county as well as adjoining counties, with sufficient application blanks for all, marking the names of those who were members of



CLARK W. KELLEY, Ex-President.

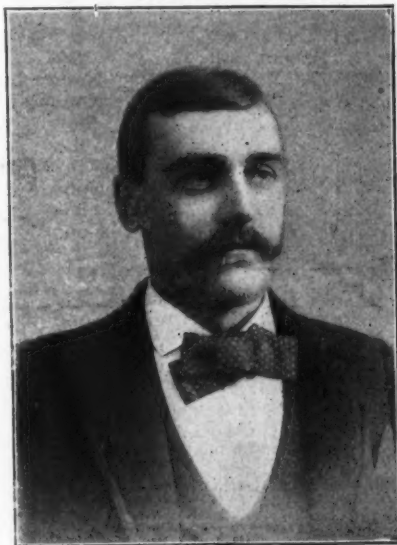
going letter I addressed all dealers in the State not members, soliciting their membership, and requesting that, if they did not care to join us, they give us their reason for not joining, as the Executive Committee were going to meet shortly, and it would be of great value in laying out our work if we could know why these dealers were not members. I received but one reply, and that was from a druggist, notifying me that I had made an error in getting him on my list as a Hardware dealer. November 25 I sent to all members such printed matter that had been published referring to Retail Hardware Dealers' Fire Insurance, and requested that they examine the same carefully and correspond with the Minnesota secretary pertaining to placing some of their risks. In this letter I called attention to the necessity of consulting pink list often, and being loyal to obligations taken, and again mentioning the fact that the officers were powerless to act on matters which might be on the minds of members if they were not conveyed to them. This letter had a perforated piece attached which I requested members to fill out, which when filled out would give me a complete list of regular Hardware, general stores carrying Hardware, and also detrimental stores in their town.

November 27 I addressed all Hardware dealers, and called attention briefly to fire insurance feature of work, and asked that they fill out attached sheet as in foregoing letter pertaining to stores in their towns. December 4 postals were sent to both members and those we were trying to get to become members who had not



H. B. ALLEN, of Executive Committee.

the association, and requested that they take up a line of correspondence with those not members to try and get them to attend the annual meeting, thinking by this last correspondence such a chain of letter writing would be started among the members that a good attendance would be obtained. On January 25, one week following my former letter, I wrote the dealers not members urging them to join us before the annual meeting, thinking this letter would get into their hands about the time you had commenced your missionary work. I feel very grateful to our members for the work they must have done, as I received during the ten days following my letter more applications for membership than during the entire six months preceding. This shows plainly what can be accomplished when every one takes hold. February 10 I sent a programme of this



H. F. STREHLOW, of Executive Committee.

meeting to all dealers in the State, and with it inclosed a letter urging attendance.

VOLUME OF CORRESPONDENCE.

The foregoing circular letter correspondence which I prepared on mimeograph, with exception of one, comprises all of that class of my correspondence during the preceding 12 months. In addition to that, that you can

better understand the extent the mail has been used by me in endeavoring to keep in close touch with you and to give other matters in our work the required attention, I will, as in my former reports, submit to you a few figures showing the correspondence handled through this office. Since our last meeting I have written (as my letter press copies will show) 1075 letters and employed a stenographer for 165 in addition to these. I have written 15 circular letters as previously described, each averaging 150 copies. I have received, not including circulars, probably 1200 to 1300 letters, estimating as closely as possible 5000 pieces of mail that I have handled in this office. The amount of postage has been \$64.16. This volume of correspondence and expenditure of postage may appear to many entirely unnecessary, and I will admit that it is far in excess of what I anticipated when I accepted this office 12 months ago. The cost of postage had never entered my mind when matters in this work requiring attention were brought to my notice.

MEMBERSHIP.

Much of the circular letter correspondence has been directed toward the increasing of our membership, which feature of our work has required a great deal of labor ever since our organization two and one-half years ago. It has been the aim of your officers to enroll as members as many as possible of the 185 Hardware dealers that are within the State.

Our growth was most rapid during the first year, and the second year we gained new members. This year we have added 26 to our membership. Our membership a year ago was 106; to-day we have 112 members in good standing. From our organization during the past year we have lost 15 by discontinuing the Hardware business. Four we have dropped by their request. Six, I am sorry to report, we have dropped on account of the financial support they neglected giving us. The six we have dropped for this cause have totally ignored my entire correspondence and permitted drafts which we made on them to be returned, attaching 35 cents expense to each, without a word of explanation. That you can appreciate how thoroughly our membership is distributed throughout the State I will submit a few figures giving you the available dealers and the members we now have in good standing:

County.	Available members.	Members.
Barnes.....	6	6
Burleigh.....	3	1
Benson.....	2	1
Bottineau.....	6	5
Billings.....	None	
Boreman.....	None	
Cass.....	20	13
Cavaller.....	9	7
Dickey.....	5	None
Dunn.....	None	
Eddy.....	3	1
Emmons.....	None	
Foster.....	2	2
Grand Forks.....	14	10
Griggs.....	2	2
Hettinger.....	None	
Kidder.....	2	1
Lamoure.....	5	3
Logan.....	None	
Mercer.....	None	
Morton.....	2	1
McHenry.....	3	None
McIntosh.....	None	
McLean.....	None	
Nelson.....	5	4
Oliver.....	None	
Pembina.....	13	9
Pierce.....	2	1
Ramsay.....	5	4
Ransom.....	6	4
Richland.....	9	4
Rolette.....	2	1
Sargant.....	5	2
Stark.....	2	2
Steele.....	5	2
Stutsman.....	5	2
Towner.....	3	2
Trall.....	14	10
Walsh.....	17	9

Ward.....	2	2
Wells.....	6	None
Williams.....	None	

As you will note from the above comparisons, there are 11 counties in North Dakota without a Hardware dealer. There are but three in the State where dealers are located that we have no representatives. In six counties we have every dealer; in many all but two or three, and in the large majority we have over half.

MEANS TO OBTAIN THE REMAINING HARDWARE DEALERS.

From my statement of the available members in State and the members we now have you see there are 74 more we want. To these during the past year I have written I imagine they think more frequently than I should, but it has been with but one object in view and that was to obtain every Hardware firm in the State in the association. I wish that during the session some means might be suggested to obtain the membership of the remaining dealers. Even though we find these 74 dealers not yet members, there is much pleasure in knowing our percentage of members, in comparison with the available dealers in the State, is to-day considerably larger than in any other State Hardware association.

DELINQUENT MEMBERS.

Considerable of the expense which is included in the amount expended for postage has been used in collecting the annual dues from delinquent members. I regret to make mention of this matter, but I believe it is principally carelessness in allowing the dues to drag as many have. We trust that they will be more punctual in the future if the matter is now brought to their notice, and show them that through their neglect the association has been put to unnecessary expense.

ONLY ONE NOW DELINQUENT.

To show you such portion of postage that has been used in correspondence with delinquents has not been spent for naught, I will say that to-day we have on membership roll but one member in arrears. Twelve months ago we carried 14, which condition is very gratifying and I believe it shows the growing interest of our members. From the numerous communications sent delinquents we have found but one member who has asked for an extension. His business was burned the past summer, but he desires to continue his membership, although he will not resume business again till spring. To such a member I believe it would be your desire to continue him on our rolls.

SUGGESTION OF PRESIDENT O'BRIEN.

In a paper written by President O'Brien and read before the Minnesota meeting a year ago he brought out plainly the urgency of members being just as punctual in paying the association debts as any other, and that they should consider their obligations to the association of as much importance and identical to any other. That a record of it should be kept by them as carefully in their memorandum book of payments as though it was subject to a 5 per cent. ten days. I feel safe in predicting that if such a spirit is carried out during the next 12 months, the expenditures of this office for postage will be very much reduced, and lessen the opportunity of your secretary injuring the feelings of delinquents in his endeavors to keep cash balances in proper color.

LOYALTY OF MEMBERS.

There is nothing brought to the notice of your officers that hurts the association more than to have it reported that this or that member is buying goods from either a manufacturer or jobber who is not in sympathy with our work. It is not probable that all the reports are true, as much food is made by our enemies by such errors. To our regret it is known that some of our members have become careless and placed orders for goods with houses that are listed as disapproving our association. I would recommend that this meeting provide, if possible, some means to more forcibly impress on the minds of these members who are thoughtless in buying goods the neces-

sity of purchasing only from those to whom we look for support.

SHALL OUR ASSOCIATION BE EXCLUSIVE HARDWARE?

Since our organization two and a half years ago we have had opportunities to see where we could make changes that would prove our work more beneficial to the Hardware dealer, and, on the other hand, had opportunities to see where we may have enacted rules in the start that have since proved detrimental. With this condition in mind I would recommend that during the session the members discuss the advisability of admitting all general stores in our State that are selling Hardware in connection with other lines on a profitable basis or to exclude them. We have in the past admitted as members general store dealers who were carrying Hardware when in towns where no exclusive Hardware dealers were located. This has opened a large field for dissatisfaction from many sources, and it should be settled now while we are together as to whether we are an association of exclusive dealers or otherwise.

EXECUTIVE COMMITTEE MEETING.

During the past year the Executive Committee have been called together but once. This meeting was held in Grand Forks, in September, for the purpose of acting on in-



NICK HALVERSON, Ex-Member Executive Committee.

formation given as to manner and methods adopted by various merchants in the State in conducting their business and such other matters as required attention. This meeting resulted in the compiling of a revised list of detrimental stores, which was at once furnished through the Northwestern Association to all jobbers and manufacturers favoring our work. Although the committee has had but this one meeting the past year much correspondence has passed between its members. It has been through that channel I have received my instructions from your directing officers.

THE BANKRUPTCY LAW.

Many hardships and much injustice is done the merchants of our country to-day by the present Bankruptcy law, and I would be much pleased to see the organized commercial bodies throughout the United States bind together in a strong appeal to their various representatives in Washington for either the entire repeal of the existing law or such modification of it that the protection and benefits are not entirely on the side of the debtor. With this result in view, would it not be well during this meeting to have proper resolutions framed for transmission to our representatives and urge their support?

NATIONAL ASSOCIATION.

During the past few weeks most of us have learned of the agitation toward the formation of a National Association of Retail Hardware Dealers, and of the proposed

meeting in Chicago, March 12, of representatives from the various organized States.

This matter will be brought up for discussion during our meeting, and it is very important that you give it



C. A. RHEINHART, Ex-Member Executive Committee.

careful thought, and be free in expressing your views before this convention.

TRADE PAPERS.

But few probably think of or appreciate the assistance given our work by the trade papers. They are ever ready to carry to our members through their columns any missions we may wish to convey. It is through their efforts to a great extent that our work has been so progressive. To these papers we are justly indebted, and to the publishers of *The Iron Age* we are doubly so, as through their kind offer this association will be permitted soon after the meeting to furnish every Hardware firm in North Dakota, in pamphlet form, a full report of this meeting without expense of any kind to it. I would recommend that appropriate resolutions be passed at this meeting, setting forth the appreciation of this association to the trade papers as a whole for the valuable assistance given us, and also to *The Iron Age* for their



A. E. COOK, Ex-Member Executive Committee.

generous offer in presenting to us the proceedings of the meeting for distribution to the dealers in the State.

MUTUAL FIRE INSURANCE.

One of the progressive movements in association work during the past year has been the perfecting of plans for mutual fire insurance for Northwestern Hardware deal-

ers. Soon after the passage of resolutions at annual meetings a year ago, favoring this feature of work, preliminary steps were commenced by the Minnesota Association toward perfecting that branch of association work. They have carefully looked after all details pertaining to it, and much credit is due the Minnesota Association and its Insurance Board for the efficient manner in which they have prepared the foundation. To-day you have an opportunity through the Retail Hardware Dealers' Mutual Fire Insurance Company of Minnesota to secure thoroughly reliable mutual fire insurance at a cost very much less than present board rates.

The association is organized under the revised insurance laws of Minnesota, and issues the Minnesota Standard policy. The risks taken will be the very best, as they will be scattered over the States of Minnesota, Wisconsin and North Dakota. The minimum policy written will be \$500 and maximum \$3000. Policies will be written upon stocks of Hardware, tools and fixtures pertaining to such stocks, and upon building containing same, when such building is owned by the owner of stock. I have been asked several times as to the legality of policies written by this company upon property in this State, inasmuch as they were not admitted to do business by a regular certificate from the Insurance Commissioner of North Dakota. In reply to this I refer you to a case decided by the United States Supreme Court, March 1, 1897, and reported in volume 17, page 427 of their Court Reporter, which is a parallel case to ours, and states briefly that "A citizen of any State had a right to enter into a contract of insurance in any other State for insurance of his property within the State of his residence, even though the company he desired placing his insurance with had not complied with insurance laws in the State where he resided and desired the insurance."

The Minnesota Company could not set up an office in North Dakota, nor could they make their contracts of insurance here, but they can accept risks sent them by our members to their offices in Minneapolis, and issue policies and enter into contracts with us through that office, which contracts are sustained through the highest courts in our land. I have also taken this matter up with the Insurance Commissioner of North Dakota, and in his report to me he said that he had had the Attorney-General look the case in question up and found it as I have outlined it to you. I believe that this feature of our association work is worthy of the careful consideration of every Hardware dealer in the Northwest. The principle is right, and if generally supported would prove a profitable business venture to them. To those of you who have not already placed insurance with this company, or who are contemplating changing or increasing that which you now have, I would suggest that you correspond with the secretary in Minneapolis, who will be pleased to furnish you with full details.

TRADE CHANGES.

As we enter another year we find throughout our State some changes among the Hardware trade, and a few among our members. To the new dealer just entering the field we extend our right hand of fellowship, and welcome in our ranks. Where business changes have occurred and some of our members left to enter other fields of labor we dislike to lose them from our association, but extend to them our best wishes.

PRESIDENT KELLEY'S RETIREMENT.

It is with much regret that I am compelled to mention the retirement of President Kelley from active business. We all know that he has earned a long deserved rest from business cares, but in his case we are selfish, and wish that he might have remained in our association longer. In him our association is losing a steadfast friend, and one who has always been anxious for the advancement of our work. From the very first agitation of a Hardware association in North Dakota, he has ever been, as you all know, an active supporter and an untiring worker. Since our organization many difficult matters in connection with our work have been presented to him

for his adjustment, and with the same skill and energy that he has handled and succeeded in his own business, so has he guided us successfully through these stages. In his retirement he can feel satisfied that he has left us landed on safe ground for our future advancement.

To Mr. Kelley our association is much indebted, and I am sure I speak for our entire membership in extending to him their heartfelt thanks for the very valuable service he has rendered our association since its organization.

To him and the other officers and members of the association I desire to extend my most sincere thanks for the encouragement and assistance given me during the year in the discharge of my duties. Thanking you for your kind attention, I submit to you this report for your consideration.

The report of Treasurer Joy of Hamilton was then read and the two were accepted and placed on file.

Following the reports of officials short addresses were made by the representatives of the jobbing houses, who were present in goodly numbers. They one and all showed a hearty disposition to work in harmony with the association and to do all in their power to advance the interests of the association.

Executive Committee.

Treasurer Joy spoke in favor of changing the present plan of electing a full Executive Committee of nine members each year. He favored having three members hold over, so that the board would not start in at the beginning of each year unfamiliar with the work which they were expected to do. The matter was referred to the Committee on Resolutions.

: Executive Session.

On motion the meeting went into executive session for the remainder of the afternoon. The question box was used and matters of interest to the dealers of the State were discussed behind closed doors. An adjournment was then taken until Thursday, February 22.

SECOND DAY'S SESSIONS.

The attendance at the second day's sessions of the convention was somewhat larger, owing to the fact that the Implement men had finished their labors and were ready to turn their attention to the older organization. Vice-President Allen called the meeting to order, and the first matter taken up was a call for the report of the Nominating Committee. Mr. Joy suggested that it would probably be better to hear from the Committee on Resolutions, owing to the fact that a change was to be made in the by-laws regarding the election of an Executive Committee. This was referred to the Resolutions Committee, and it was decided to hear that report first. The report read:

Amend Section 1, Article III, by striking out the word "seven" and inserting in lieu thereof the word "six;" by striking out the word "and," occurring in the third line after the word "president," and by inserting the word "secretary" between the words "vice-president" and "shall" in the fourth line; so that the section, when thus amended, shall read as follows:

ARTICLE III.—OFFICERS.

Section 1. The officers of this association shall be president, vice-president, secretary and treasurer, and six members, who, with the president, vice-president and secretary, shall constitute an Executive Committee.

Amend Section 2 of Article III, by striking out the words "Executive Committee," occurring in the first and second lines, and by adding the following to the section, making it read as follows:

Section 2. The president and vice-president shall be elected annually by ballot, and shall hold office until their successors have been elected and qualify.

At this meeting the six members of the Executive Committee shall be elected, two for a term of three years, two for a term of two years and two for a term of one year; and at subsequent annual meetings two shall be elected for a term of three years and to fill vacancies, all to be elected by ballot.

The report of the committee was adopted.

The Nominating Committee

made the following report for the permanent officers:

President, H. T. Helgesen, Milton.

Vice-President, H. Harrington, Fargo.

Executive Committee, three years, H. F. Strehlow, Casselton; I. L. Newgaard, Grafton. Two years, H. B. Allen, Jamestown; H. A. Moe, Churches Ferry. One year, M. G. Evenson, Sheldon; W. H. Pinkerton, Lakota; president, vice-president and secretary, *ex-officio*.

Delegates to the Chicago Conference.

President Helgeson and Secretary Barnes were appointed as delegates to attend conference in Chicago on March 12, to consider the formation of a national retail Hardware association.

H. N. Joy of Hamilton then presented the following paper on

Some Wrongs Which Need Righting.

The very foundation principle upon which this association rests and the very purpose for which it was called into existence is the righting of wrongs which have been existing in the particular line of trade in which we are engaged.

Some wrongs which have existed in the past have been rectified through this association, and others have been reduced more or less in their baneful influence. The effects of this organization have been felt, and the influence which it wields is far-reaching, but I venture to say that the most optimistic exponent of its power or the most enthusiastic of its advocates would hardly dare venture the assertion that the day will come when all wrongs existing in the Hardware business will be righted, even though associations multiply until every State in the Union has its own organization, and the capstone a national association, becomes, not something of the future, but an established fact.

GREAT AND SMALL WRONGS.

We have our great wrongs and our small wrongs. The former have been and are too painfully apparent to demand any attention from me at this time, and it is not my province to deal with them in this paper.

The thought occurred to me, however, that it might be well to have brought before our notice some of the smaller wrongs which it seems to me we have to contend with; and which, like the little worm that attacks the ship's timber, and soon causes the loss of the vessel, or the pin-hole in the bottom of the kettle, which slowly but effectually drains its contents, just so surely eats into and consumes that which goes to make up the balance on the right side of the ledger.

GIVING PREMIUMS.

One wrong that I will call your attention to is the system among certain manufacturers of giving premiums with their goods, which is invariably some article of Hardware.

In the good old days these snide concerns were wont to induce the unsuspecting public to purchase their adulterated wares by giving them a chromo; but the chromo days are past, and now nothing apparently will suffice so well as a bait for the sucker to bite at as some article which the would be consumer sees has real merit in it; and then he argues if the goods are not all right, the premium is, for it is a useful article of Hardware.

These unscrupulous manufacturers have not been slow to see the point, and avail themselves of the opportunity to make big sales of their questionable product, and immense profits, even after paying more for the premium than the article which accompanies it costs them.

In this way we find a pound can of adulterated baking powder offered for 60 cents; and accompanying it as a premium is a double Roasting Pan, that is reasonably worth 50 cents, or a Lantern that the Hardware dealer would lose money on at 50 cents going with this can of baking powder, both for 60 cents. And so I might mention Galvanized Pails, Granite Iron Ware, Buggy Whips, Pocket Knives, Butcher Knives and a hundred other articles in the Hardware line.

If this wholesale premium business was confined to baking powder alone we might be able to stand it, but what is true of it is equally true of other articles; such as Bicycles given away with tobacco sales; Scales with dry goods purchases; children's Express Wagons and children's Carriages with clothing sales; all of which cut into the legitimate Hardware dealer's business just that much, and go to make up the difference between a profitable and an unprofitable business.

It may be that you have not given this matter much attention, and are of the opinion that it does not amount to much; but if this is the case, I will just ask you to make it your business to watch for the next three months the amount of Hardware that is turned over in your town in this way and you will change your mind.

In conversation with the leading dealer in general merchandise in my home town, he assured me that two-thirds of his customers asked for goods with which premiums were given; and his customers will compare favorably in intelligence with those of any other community.

I asked him if they were not aware that the goods were of an inferior quality. He replied that the goods were certainly inferior to those sold in the regular way, but that did not seem to make any difference, they want the premium.

RIGHTING THE WRONG.

The wrong exists; how can it be righted? It cannot be done locally by withholding patronage from the merchants who follow this practice. All of the general dealers of my home town are friendly to me, and I believe try to keep the thing down as much as they can, but they say that their farmer customers, especially, will go to other towns where they can get the premium goods if they do not keep them.

We cannot meet the competition by selling the premium articles at a low price; I have tried that. I filled one of my show windows with Double Roasting Pans that cost me \$4.75 a dozen, and priced them at 25 cents each; but do you suppose that I could sell them while the baking powder and Roasting Pan reign was on? No, sir! they would pass right by the window, go next door and pay 60 cents for a pound can of baking powder and a Roasting Pan.

What then can be done? It seems to me that the manufacturers of Hardware, Hardware Specialties and Tinware are the ones to right the wrong.

These premiums are not manufactured by the people who use them. They cannot afford to start a factory for the purpose of making each different article that they use as a premium, but they buy them from the very people who manufacture them for us; and in most cases must buy them for less than the regular legitimate dealer does. Then, why cannot we strike at the fountain head and induce manufacturers to discontinue selling their product to those who contemplate using it as a premium?

HARDWARE HANDLED BY GROCERY STORES.

Another wrong which needs righting is the handling of Tinware, House Furnishing Goods, Cordage, Axle Grease and Machine Oils by grocery stores.

I maintain that a grocery store has no more right to sell these goods than a Hardware store has to sell tea, coffee and sugar. Some one says, why don't you do it? I reply, just simply for the reason that I am in the Hardware business, and Hardwaremen are in the habit of minding their own business, and keeping their noses out of other people's.

I don't do it for the reason that it is a well established fact in commerce that the man who handles one line of goods, and does it right, is not only able to give his customers better satisfaction, sell them better goods for less money, keep a better establishment, but will make a success of business, while the road is strewn with the carcasses of the fellows who keep a little of every line that everybody else has, and never have what their customers want in their own line.

HOW CAN THIS WRONG BE RIGHTED?

Grocery stores purchase these goods from wholesale grocery and crockery houses. Now, I believe that wholesale grocery and crockery houses have no more right to keep Tinware, Lanterns, House Furnishing Goods, Cordage, &c., than wholesale Hardware houses have to keep prunes, canned goods and earthen ware.

I take it for granted that the members of this association buy their Tinware, House Furnishing Goods, Cordage and like goods from Hardware jobbers or manufacturers. If any of you do not, then you are entitled to no sympathy if grocery stores do cut into your trade; for if a traveler for a wholesale grocery or crockery house can sell you these goods, he will continue to sell the grocer on the opposite corner.

The remedy, then, it seems to me, is, in the first place, Hardware dealers buy your Tinware, House Furnishing Goods, &c., from Hardware jobbers, and if wholesale grocery and crockery houses continue to handle these goods, as much as I dislike mixing stocks, it seems that the only solution will be for Hardware jobbers to put in certain lines of groceries and earthen ware sufficient to enable them as well as their retail dealers to get, dollar for dollar, what they lose by this contemptible practice.

Travelers for wholesale grocery and crockery houses frequently try to induce purchases from Hardware dealers by baiting. I heard of a recent occurrence of this character, where Ham's cold blast Lanterns were offered by one of these concerns at \$1.75 a dozen less than Hardware jobbers were selling them at.

LOYALTY.

In conclusion let me say that we must be loyal to those from whom we expect loyalty, and not allow our trade to be subverted into unfriendly channels by biting at seductive baits. We must use our influence, as individuals and as associations, with jobbers and manufacturers, to co-operate with us in stamping out the small as well as the great wrongs from which our business is suffering.

They can only assist us when we have apprised them of these wrongs with which we are confronted, but which they may be ignorant of, and I apprehend that if we make ourselves heard in this way many of the wrongs now existing and which may hereafter crop up will be speedily and effectually righted.

Mutual Fire Insurance.

Owing to the illness of H. S. Diesem of LaMoure, his paper on "The Effect of Department Stores on the Hardware Trade" was not read. His place on the programme was taken by A. C. Hatch of Battle Lake, Minn., who talked on the subject of the Retail Hardware Dealers' Mutual Fire Insurance Company. He gave a history of the organization and the mode of procedure by which the assessments for insurance are made, and also the regulations governing the organization.

Some Observations About Expansion.

G. W. Wolbert of Casselton presented a paper under the above title, as follows:

Wherever there is growth or development in business there is expansion.

This association was organized about two and one-half years ago. It was the intention of the promoters to benefit the entire Hardware trade of this State. At first only a few believed it would be of any benefit to them individually; it might help the smaller dealer, but the larger stores did not need us. Possibly some of the big men now believe that they need this co-operation more than ever.

The larger stores are usually in the larger towns, where there is more chance for department stores to cut in on special lines. But the ever greedy general

store is to be found everywhere, and usually trying to sell everything.

We find that all classes of Hardware dealers

NOW LOOK TO THE ASSOCIATION

for assistance in many ways. We are growing in membership and in the force of our work. Our association is now a part of the Minnesota and Wisconsin associations forming the Northwestern Association. Is that not expansion in less than three years? We must not expect all the good things to come at once. We must grow like children and learn each year some things that will benefit us in the future.

I have in mind some few things learned since the organization. We cannot accomplish all that we desire—nor can children—we can do part of the things we wish, and by steady perseverance overcome obstacles now in our path.

"Perseverance, dear my Lord,
Keeps honor bright. To have done is to hang
Quite out of fashion, like a rusty nail
In monumental mockery. Take the instant way,
For honor travels in a strait so narrow
Where one but goes abreast. Keep then the path;
For emulation hath a thousand sons
That one by one pursue. If you give way
Or hedge aside from the direct forthright,
Like to an enter'd tide, they all rush by,
And leave you hindmost."

We have done a great deal more in two years than our best friends thought possible, and can in two years more have our chest expanded like the cartoons of John Bull. But hard work and united effort on the part of each individual is needed. We have agreed to abide by and conform to certain statements sent us from an Executive Committee. Do we? Some do. Others do as they think best. What do you name your Executive Committee for? It is supposed that they represent the concentrated thought of this body. We know that they do their work carefully and with thought only of your best interests. They know the facts in detail, which are impossible for you individually to learn.

STANDING BY THE ORGANIZATION.

When they send you a list of things to do and not to do, why don't you follow these lists? It is a well known fact that all the members do not follow these lists. When this is known and advertised it acts as a damper on the work of the committee. They feel that you do not appreciate their efforts.

These matters take a great deal of time and the pay to the president and secretary are mere pittance for the value of the services performed.

Organization is what we have, but not yet thorough. You should be like soldiers in battle; take orders given you and execute them to the best of your ability. If each one does his share in the battle then victory is assured.

Should some shirk their duty and look for the nearest road home, then they act like deserters, and possibly traitors. We find all through life that there are numerous men who want to get through this world easily. Always ready to join anything, and if it is a success—they did it; if it is a failure—they told you so. They are the people who always can do it right, but when given something to accomplish they are too busy with other matters. Their tongue is their principal organ of action. Pope wrote: "For fools rush in where angels fear to tread."

It takes brains, not talk, to work successes in this world. Not one in ten of our members have any idea of the work done for you and this association by President Kelley and Secretary Barnes. And it is brain work, not talk. All the grievances are not real. Some are only dreams. Ask these gentlemen how often they receive complaints which are hardly worth consideration.

COMPETITORS.

If the dealers would only practice the teachings of the Bible—"love one another and so fulfill the law of

Christ"—there would be less cause for complaints. Have you ever thought that possibly your competitor has as many reasons to complain of you as you have against him? Burns wrote:

"O wad some power the giftie gie us
To see oursel's as others see us.
It wad frae monie a blunder free us,
And foolish notion."

Why not get on speaking terms with your competitor? Possibly he is as good as you are. Again allow me to quote from Pope:

"Of all the causes which conspire to blind
Men's erring judgment, and misguide the mind,
What the weak head with strongest bias rules,
Is pride, the never failing vice of fools.

"If once right reason drives that cloud away
Truth breaks upon us with resistless day.
Trust not yourself; but your defects to know
Make use of every friend—and every foe.
A little learning is a dangerous thing."

None of us are perfect, although we sometimes try to fool ourselves and think we are almost too good for this world; but all too quickly we get a bump that arouses us to the fact that we are only human, and "to err is human." Don't deceive yourself by the thought that you own your goods a little cheaper than your neighbor—possibly it is the reverse. No salesman and no buyer has all the snaps.

GIVE A WIDE BERTH

In your store to those articles sold at cost by catalogue houses and department stores. They are staple goods, you say, and too well known; we must sell them. I beg to differ with you. They sell themselves if you have the right price attached. Just like Nails and Wire; put on the right price—which is your cost or less than cost—and they sell themselves. Why do you do it? You cannot tell me any sensible reason.

Expand—catch a new lease of life and find

SOME FIRST-CLASS SUBSTITUTE

for many of these articles. You can find it. Don't believe that people will tell you all about it. You tell them, as they like to hear you talk. There are a few goods which I believe it would be better if not sold by the dealers. Quietly leave them alone. Don't carry them in stock and avoid ordering them. Let the manufacturers learn that you are not satisfied with 25 cents profit on a \$15 sale. You all know of goods that come under this list. The united work of all members of the Northwestern Hardware Dealers' Association would soon bring about these changes. Why not try it? Such effort on other lines that I could name has already done wonders. Take the catalogues, look them over, make out your own list of goods sold at cost or less, and then personally refuse to handle them. You can sell any other good line if you only think so and post yourself on its merits.

WHAT IS A HARDWARE STORE?

We have no rule to guide the Executive Committee on this subject, and it has caused some friction in the past. It should be decided at this meeting by a vote of the members.

It has been whispered that some of our members are attempting to use this association for their own benefit in cutting out competition. Look it up carefully and locate the Hardware business. I would offer as a suggestion that you ask each salesman who calls at towns in question to give you their views in writing of the case. Then your Executive Committee can have its duty simplified.

Why not let the jobbers, if they so desire, give each of their salesmen one of your latest lists. It might aid in disseminating the true principles of our association. It surely could harm no one.

JOBBERS.

Now as to your friends the jobbers or any one selling you goods. The jobbers will always try to be your friends. From the conditions of your business they

must be friendly to be successful. They need you equally to your need for them—unless you select them as your bankers. If you do this then buy goods right and pay them all you have agreed, both in price and interest. Don't try any small talk, but follow business rules. You are then making for yourself lasting friendships.

"HE WHO WOULD HAVE FRIENDS MUST BE FRIENDLY."

Jobbers and salesmen are mortals, and some will do exactly as customers often do to you—tell the truth when necessary and stretch it awfully when they think it will not break. I have men on my list now who years ago stretched the truth to me, and I cannot believe them since that time. You can paint a black sheep white, but it is still a black sheep. The man who is honest to himself must be honest with others. We believe our trade and business is as good as any and better than some, hence this association, which I believe will always be a success. But united we stand, divided we fall.

Whenever the salesman offers you goods for

FUTURE DELIVERY AT GUARANTEED PRICES,

buy them if you will need them. It is for your benefit to do so. The salesmen have these prices and terms for special reasons and you cannot afford to miss them, when you personally know that the man and the house he represents are reliable. By so doing you place yourself on a basis of competition with other dealers. Very frequently low retail prices are made in this way when, had you used the same business judgment as your competitor, you could have bought as cheap.

DON'T LIE

about business matters and prices. Recollect that no one is so badly hurt in wrong doing as the person who commits the act. You will surely be caught at it, and then you have branded yourself. Can you afford it?

RECIPROCATION.

I have referred above to you principally as individuals. Now as to the association. We ask certain people to do specified things for us. In return for these we have agreed to reciprocate in other ways. As a society we do, but as individuals we fail to keep our vows. Why? I have often thought why and wherefore. I can never think of but one reason. That we are not honest to ourselves.

When the manufacturers and jobbers agree to try to protect us they do as they agree, with rare exceptions. With equally rare exceptions we do not protect them. We buy of any one and every one that comes along. We let firms who sell every store in the town come in and sell us the same goods, when the jobbers have the same goods, can do equally well in prices and also are protecting us. We will buy 1-24 gross of an article and kick because the price is not equal to the price given us on a gross order by some specialty man. We have no right to expect it. Now whose fault is it? It is ours as individuals. I claim that the jobbers have not so far been treated right by the association members.

Whenever you have any real or fancied grievances tell them to the traveling salesman or write the firm about them. You can always have wrongs righted. You can also have another satisfaction, and that is the information that the well posted salesman can always give you on prices and quality of goods. He is always trying to please you and be your friend.

If he does not treat you right, there are others—try them.

"The friends thou hast, and then adoption tried,
Bind them to thy soul with hoops of steel."

In conclusion—we must strive to do as we agree in all things. And if any of you wonder why you are to do all these things and do them thoroughly, allow me to quote:

WHAT IS THE GAIN.

"What is the gain?

If one should run a noble race,
And at the last, with weary pace,
Win to the goal, and find his years
A harvest field of waste and tears,
Of turmoil and of buried trust
Rich with dead hopes and bitter dust,
And strife and sneer and ceaseless pain,
What is the gain?

"What is the gain?

When having reached a sunlit hight
Through barren sweeps of gloomful night,
Hoping to see beyond the crest
Fair lands of beauty and of rest,
There lies before, stretched far away,
Unto the confines of the day,
A desolate and shadeless plain,
What is the gain?

"What is the gain?

To sail for months of cold and toil
Across wide seas, where winds recoil,
Only to gather strength and roar
A louder challenge than before,
And find, when through fogs thick and dun
The rocky coast at last is won,
No haven from that storm vexed rain,
What is the gain?

"What is the gain?

Why, we win this race, we see the light,
We conquer where the storm's winds fight,
We show the way to those who wait
With faint hearts by the walls of fate,
Our banners flutter in the van
Of battles fought for thought and man,
And ignorance and darkness wane,
This is the gain."

W. H. Pinkerton of Lakota was not present, but his paper on

The Country Retailer's Superior Advantages in Trade

was read by H. A. Moe of Churches Ferry, as follows:

In taking up the subject of "The Country Retailer's Superior Advantages in Trade," I wish to call attention to the fact that there are certain requirements which we must surely comply with before we have a right to claim any great degree of success in business.

Among them I would mention, first, it is important that we have a desirable location for our store. There may be some men who can take a large amount of business with them to some out-of-the-way business location, but this is the exception, and in most such cases, if we study the situation, we are apt to find that such parties have no strong competition or they would not be able to do this.

Having obtained a suitable location, we must then make our

STORE BUILDING AND ARRANGEMENT OF STOCK ATTRACTIVE.

I have visited quite a large number of retail Hardware stores in the course of my wanderings, and I regret to say, what you certainly know, if you are of an observing mind, that a very large per cent. of these stores are dark, dusty and disorderly, and the most of those so kept are only just able to eke out an existence. The proprietor has plenty of time to sit by the stove in the rear of the room or in a dirty office and complain of the hard times.

A little light colored paper on the walls, clean fresh paint on the wood work and front of the store, would give an entirely new appearance to the establishment. Add to this one or two hours' work each day in keeping the dust off the goods and everything in order, with seasonable goods always made prominent, and it is only a question of a little time when his trade will begin to show an increase and perhaps reach a point where the clerk will scarcely be able to find time to keep the store dusted and in order. At such times we can overlook a little disorder.

Again, we must have a

THOROUGH KNOWLEDGE OF THE BUSINESS,

so that in buying or selling we will have an intelligent idea of the quality, prices and uses of the goods we sell. How many times in our experience we have seen customers in our stores who had a much better knowledge of the quality or uses of an article on sale than the clerk or even the proprietor who was making the sale. It is a great advantage to keep the same clerks, where that is possible, for only in this way can we have a force about us who understand the details of the business thoroughly, and particularly that they may be familiar with our personal methods of conducting business.

CLERKS.

We must insist on it that our clerks wait on our customers promptly, intelligently and courteously. The hat should be removed when waiting on a lady, the door opened and closed when possible, and the proper offer made as to delivering the goods purchased. It may seem unnecessary to speak of such things, but in these very methods are written the success or failure of many Hardware dealers.

PRICES.

In making our purchases we must also be intelligent and posted as to prices. At our first convention, I think it was, a dealer made mention of the fact that his competitor was selling a certain article for 25 cents, and he did not see how he could do it. At that very time I was doing the same thing and making a very reasonable profit. It was clear that the gentleman had failed to purchase at the right prices, or was holding up the price on goods carried for some time.

A COMPLETE STOCK.

The last requirement which I will mention is one on which there will be no difference of opinion, and that is, we must carry a complete stock of goods required in our varied locations. It was only a few days ago that a gentleman from a point some distance from my town remarked in my store that the gentleman who had the exclusive Hardware store in his town did not carry a complete stock. This very Hardwareman is a member of this association, and this is one reason I mention it. His customer said that out of six small articles called for he could probably only find about three in stock. He made the prophecy that it would be only a short time till some progressive individual would open a first-class Hardware store in that place and our brother's small business would be still further depleted. I can conceive it altogether possible that this unprogressive member might even go so far as to come to our association, asking that we formulate some rule whereby we would attempt to prevent the entrance of a second store in a town of that size. In such a case the unprogressive man must take the blame home to himself, and in the end he will very likely fail, under the law of the survival of the fittest.

Having shown you what I consider to be the essential features of a first-class Hardware store, I will now proceed to enumerate the

ADVANTAGES

which such an up to date country dealer has over the large city dealer. First, in the country town we have the advantage of letting the people see our wares, and our customers are no different from ourselves in that they would rather buy something that they can see and examine than something they see a picture of in some catalogue. Some of you may not agree with me on this point, but my experience teaches me that this is true. How many of you who do not agree with me will claim that you find it easier to sell an article from your catalogue or from your floor or your shelf? Not only this, but how many times do we sell goods because our customer sees the goods in our store, which reminds him that he needs the article in question.

GOODS WANTED QUICKLY.

Another advantage lies in the fact that in a large percentage of cases our friends do not anticipate their

wants, but neglect their purchases until the last minute, and then if we have the goods in stock we will make the sale, for the reason, if none other, that they have not time to send for them.

There are many times that we can actually

UNDERSELL THE LARGE DEPARTMENT STORES.

If you have not discovered this fact it will pay you to make a special trip to the city for the purpose of investigation. During the present winter the writer, being in Minneapolis, took time to look through the Hardware department of one of the leading department stores. I found a large number of articles, particularly among the smaller articles, selling at double my prices. Many 5-cent articles selling at 10 cents, and 10-cent articles selling at 15 cents.

In another large House Furnishing establishment I found a line of high grade Heaters, the same as I handle (the line is not listed) that were being sold at about \$8 each more than my prices, making freight allowance. This same house has done this for a number of years to my knowledge. Still, I am making a living profit on the Stoves at my prices.

These are facts that we ought to keep posted on and make the most of them. Hereafter I intend to take more time to look up such matters when in the cities, and I know that I will find many more such cases. If the attention of our trade is called to a number of such cases it cannot help but have a beneficial effect, both in making sales and in satisfying them that the purchases already made have been at reasonable prices.

CREDIT.

Another advantage I wish to name is that we can extend credit to our customers. With most of us a very large per cent. of our business goes onto our books for at least a few days and a great deal for weeks or months.

This is a powerful lever when used with good judgment and discretion. It so often happens that just at the time that the goods are wanted the money is not in hand. I have even heard men say that they did not care for cash trade because there was more profit on credit sales.

HELPING A CUSTOMER.

We have another advantage in that our customers do not always fully understand the best way to use an article or all the different purposes for which it can be used. Having it before them, we can explain all its purposes and best methods of using the same.

At another time a customer comes to our store asking advice as to the best thing to buy for a certain purpose. Never fail to give such a man the benefit of your very best judgment, and fully explain your reasons for advocating a certain article. I have known men to take advantage of such an occasion to palm off an article of dead stock on such a customer, thus taking advantage of his ignorance, and at the same time forfeiting your right to his confidence. Better were it to sell said piece of dead stock for half price to some one who would take it with no recommendation from you or consign it to the trash pile if needs be.

As retailers in small towns we have the opportunity to know the

WANTS OF OUR CUSTOMERS.

and can speak to them personally about some article that we have which will interest them. To be sure, this privilege must be used with discretion, but it can often be done to advantage.

If you will pardon a personal experience, for the sake of illustration on this point, I will give you a little history in regard to quite a successful

SPECIAL SALE OF STEEL RANGES

which I had in December last. The method of conducting these is no doubt familiar to many of you. Previous to the week of the special sale I had thoroughly advertised the date and the extra inducements offered, includ-

ing a free lunch to all comers. This was done in two local papers, and by about 500 personal invitations by mail. This brought good crowds to the store and did good in creating enthusiasm for the Stove, both then and for the future. But when the sale was over, I found that just about one-half of the sales made were to men that I had gone out on the street or to their places of business and requested their presence in the store for a few minutes, just to show them a good thing.

One man said that I got him out of bed after he had retired at night; I will admit that it was a little late, but that he had actually retired I will not admit. In any case I made the sale, and his wife is very much delighted with the Range.

If I had depended on newspaper advertising alone or in connection with the mailed invitations, as the department store must be content to do, my sales would have been reduced just about one-half.

WARRANTED GOODS.

Another advantage we have is in handling several lines of fully warranted goods. In these we have the exclusive sale in our town and the department stores rarely handle such goods. In these we can work up a valuable business.

Again, many of us have

OTHER LINES OF BUSINESS

that draw customers to our establishment; goods that people cannot send away for if they would. When people come for these things we have an opportunity to show them our full line. Right here many of us fail. Our methods are after this fashion: We get the agency for a desirable line of goods, and we congratulate ourselves on the fact and immediately resolve to show them to every desirable customer that crosses our threshold. We do well for a time and have very fair success, but gradually it gets to seem like an old story to us, and we lose interest and soon the effort is allowed to die, before we have called the attention of one-fourth of our customers to the particularly good article we have to offer.

Now, if we conduct our business in this way, we have no right to blame some one of more push and perseverance, one who carries a complete line and shows it to advantage in an attractive place of business and on every occasion that presents itself, one who pushes his business until the volume grows to such proportions that he can buy many things in car lots and other quantities at the lowest market price—we have no right, I say, to blame them for our lack of success and seek the association for some form of redress. We must shoulder the blame ourselves and correct our own methods, infuse new life into our business and then will we be on the road to success.

Fargo Orphans' Home.

H. Harrington of Fargo at this juncture stated to the convention that Mrs. Benedict and Mrs. Sloan wished to address the convention in regard to the new proposed Orphans' Home for Fargo. The ladies presented the matter very convincingly, and Mr. Wolbert of Casselton commended the laudable efforts of the ladies. Mr. Harrington moved that each member make himself a committee of one to aid the home in their home town. The motion was carried, and Mr. Harrington and Mr. Strehlow were appointed as a committee to take up a collection then and there. The Hardware merchants were liberal, and the donations amounted to \$43, which was turned over to the ladies. Mr. Wolbert was appointed a committee of one to send out subscription lists to each member of the association in the State and ask them to do what they could in aid of the institution.

H. F. Strehlow of Casselton then read the following paper on

Competition.

In obedience to the urgent request of our secretary, Brother Barnes, I finally became weak kneed and con-

sented to read a paper before this, our third annual convention. This is not my maiden effort. Oh, no. As you well remember, I tried to read you asleep once on a previous occasion. The subject I have selected is one which we deal with every day in the week, excepting Sundays, of course (when the freights don't run), and that is Competition.

Before proceeding any further on my course, I wish to have it distinctly understood that if there is anything in my paper that may be objectionable in your minds, that you do not approve of, and you can see a chance to improve the golden opportunity, you will please speak out loud so our secretary may hear you, as he has full power under the rules of this convention to see that everything is fixed all O. K., and you can go home satisfied. My dear brethren, I will not bore you to death as a Boer with Competition just at this time, as you all know we are very busy at present—in South Africa.

Well, gentlemen, not to beat about the bush, I believe I have bit off more than I can chew. If my subject was condensed in liquid form I would not hesitate to tackle the job, but as I have all kinds of faith and know from experience that the Hardwaremen of North Dakota have the reputation of being very modest and considerate, I have no hesitancy to proceed. I will endeavor to cut my address short, as you are undoubtedly tired, and I hope you will excuse me for not going into the details of my subject more fully, which I would be pleased to do in justice to myself, had I the time.

Competition, they say, is the life of trade (and on the quiet, to some of them, death).

We meet annually to discuss, pro and con, to devise ways and means how best to

COMPETE WITH OUR COMPETITORS.

such as catalogue houses, department stores, peddlers, &c. Are we meeting with success as an organization? I must emphatically say, Yes. In union there is strength, and the greater interest each and every one of us take in this association the more successful we will be as an organization. Do not throw too much work upon our officers, but be ever ready to assist them and give them all the aid which is in your power, and remember that each and every member is a stockholder in this grand association of ours, and that we receive and share in its dividends alike. As a matter of fact, do you know that we, as individuals, fight the same enemies the association does? Yes, I think we can go them one better. We have not only the catalogue houses, department stores, Steel Range peddlers, &c., and last, but not least, also our local competitor to compete with. Some of you may wonder what disposition I may make to

OVERCOME SOME OF THIS COMPETITION.

I go at it in this way, in regard to catalogue houses, &c. In the first place I have on file all the leading catalogues and price-lists which are issued up to date, and keep posted on their prices. To meet this class of competition I always keep a little of the Cheap John ware on hand, which I virtually sell at cost. However, I invariably show them the better class of goods first, and if they hesitate on the price I reason with them and endeavor to show them the folly of buying the cheaper class of article, and do you know, I most always meet with success. One very essential point which we must not overlook is this, that we must also keep a close check on those who purchase through these various mediums. Your own drayman is the best man I know of to keep you posted on these shipments. We will suppose that here comes one of those fellows now. I shake his hand, say "How do you do?" &c., with all due respect and courtesy. This, possibly, is something he did not expect. And you know that if he is not one of those chilly icemen we read about, that I have by this kind of a reception made half of the sale. He undoubtedly was astonished and expected a good, brown roast. You see, I fooled him. Do you realize my gain? Now he starts to buy. I give him prices. He says he can buy this and that cheaper

but will not let on where it is. So I question him a little closer, and then I will tell him these prices are from such and such a place, get out my catalogue, which is the same as his, and here I give him another surprise party. He will wonder where I got it from, and will begin to size me up. We will now start to talk business. I will say to him that if he will give me the same price on the same class of goods as the catalogue quotes, with freight added, that that is enough profit for me, and I will be pleased to meet any legitimate quotations he may have to offer. Sometimes I surprise him by going them one better, if in my judgment he is a man who is appreciative, and whom I cannot get at in any other way.

HAVE PATIENCE,

try this two or three times and you will succeed. Never deceive him and do always as you agreed to do and you have not only gained a customer, enriched your purse, but have also made a lifelong friend. I will now proceed to give you a taste of how I get along with my

LOCAL COMPETITORS

at home, and I am a firm believer that some of its principles are correct, and that the same should be followed more closely by merchants generally, as a rule, at home. You have nothing to lose but everything to gain. On this subject of local competition there is no question but what you will all agree with me. That is a subject we do not care to read very loud when our competitors are sitting within a stone's throw of you. Who will read this for me? In the first place, gentlemen of this convention, I can congratulate myself upon the fact that I have only gentlemen as competitors. Men who are business men in every sense of the word; men who have not come to North Dakota to seek health, but who invested money in the Hardware business to make money. It undoubtedly may seem strange to you that my competitors and myself are on speaking terms. That we smoke and eat but do not drink together—or that our families will visit one another and that they, too, will eat and drink but will not smoke together.

Say, do you know when I forget myself and try to get a little gay, that they will call my hand and meet my prices? Then I stop. I have learned one thing, and that is this: That I cannot sell all the Hardware there is to be sold in our city, either by getting foxy in cutting prices or by making unkind remarks and insinuations against them. It does not take long to find out that your competitors have as much money, brains and friends as you or that they will not hesitate to meet competition. Understanding one another thoroughly on these particular points, I will be frank enough to admit, is making me money as also for my competitors, as I am informed on very reliable authority that they are discounting all of their bills right along. Whether this is the proper feeling that should exist between local competitors, I will not say, but will leave for you, gentlemen, to decide.

Grand Forks Next Year.

A motion was made and carried enthusiastically, calling for a rising vote to the gentlemen for the able papers presented and read. The question of the place for holding the 1901 convention was next taken up, and Secretary Barnes extended an invitation to the association to meet in Grand Forks. A motion to that effect was carried unanimously, and the fourth annual convention will be held in that city on the third Wednesday of February, 1901.

Thanks to the Traveling Men.

Mr. Strehlow made a motion to offer a vote of thanks to the traveling men for their efforts toward the association. The matter was discussed at some length, and Jos. Hare of Bismarck moved that the traveling men be made honorary members of the association. Mr. Joy thought that this matter should be referred to the Executive Committee, to be disposed of at the meeting held during the executive session in the afternoon. Mr. Hare withdrew

his motion. The motion for a vote of thanks was carried unanimously.

AFTERNOON SESSION.

An executive session was held during the afternoon, at which time the Question Box was again used, and matters of a private nature were discussed.

After the meeting of the Executive Committee a report was made that the committee had elected C. N. Barnes secretary and H. N. Joy treasurer. Both are re-elections. The gentlemen have served the association well and faithfully, and their re-election met with the heartiest approval of every member present.

Resolutions.

The Resolutions Committee reported the following resolutions, which were adopted:

Resolved, That it is the wish of the Hardware dealers that the hearty thanks of this convention be extended to the railroads of the State for the very generous reduction in rates to this convention. It is also

Resolved, To extend to the trade papers our thanks for their energetic and untiring support in the past. It is our belief that our great success is due to their help, and we should always see that we lend them every support possible.

We wish to extend to the citizens of Fargo, the business men and hotels our appreciation for our entertainment while here, and also to Mayor Johnson for the use of the beautiful and useful key he so generously presented to us.

We feel that we are not capable of framing a resolution expressing our appreciation of the past officers for their never tiring and energetic work for the association, and wish to extend special thanks to President Kelley, Secretary Barnes and Treasurer Joy and the members of the Executive Committee.

Resolved, That we extend a vote of thanks to the traveling fraternity for their untiring efforts to entertain and instruct the members of the association, privately and in open session.

Resolved, That we thank the members for the very instructive papers prepared for the meeting, and suggest that steps be taken to have the same printed.

Resolved, That we extend our thanks to the Southern Hardware Jobbers' Association for the register presented our association for use at annual or special meetings.

Resolved, That this association extend to the publishers of *The Iron Age* their sincere thanks for their liberality in presenting to association the proceedings of this meeting in pamphlet form.

Nails on Free List.

The following resolution, presented by Joseph Hare of Bismarck, was unanimously carried:

Resolved, That it is the sense of the North Dakota Retail Hardware Association, assembled in convention on the 21st day of February, 1900, that Nails be placed upon the free list, and the secretary is hereby instructed to send a copy of this resolution and ask our members of Congress to use their best efforts in carrying out the spirit of the resolution.

Auditing Committee

reported that they had found the books of the secretary and treasurer correct.

Question Box.

Many subjects of much interest were discussed through the medium of the Question Box and proved a very instructive feature of the meeting. This was the first meeting ever held where the Question Box was used, and it proved of so much benefit that it will be much more prominent at their next meeting.

Stove Men's Hospitality.

Toward the close of the session the following self explanatory communication was received from the Stove men:

We, the undersigned Stove salesmen, greatly appreciate the very warm and cordial reception we have received at your hands, and can heartily say that we have greatly enjoyed our visit with you; but, owing to the extreme amount of our expense accounts, after due deliberation and without consultation with our respective managements, have concluded that it will be absolutely necessary to advance prices at once—5 per cent. and possibly 10 per cent.

The latter amount we will, however, leave open until we can see you at supper time.

This communication was signed by the following:

C. H. Cook, with Cribben & Sexton Company; C. E. Healey, Kahn Bros.; G. L. Nye, Minnesota Stove Company; E. S. Ferguson, Minnesota Stove Company; M. L. Weinberg, Peninsular Stove Company; Leigh Pruden, Favorite Stove Company; John Hatfield, Duffy-Trowbridge & Co.; John Straher, Rathbone, Sard & Co.; H. C. Goeltz, Eclipse Stove Company; John Bonnett, Bonnett & Nance.

Secretary Barnes sent the following reply:

Your communication received, and we are extremely sorry that you find it necessary to advance prices, but we are glad to know that you are liberal enough to divide the profits of this advance with us by spending a portion of it in the banquet, to which we understand you invite us this evening, and which we hereby accept.

After adjournment the members of the association marched in a body to the Hotel Waldorf, where they heartily enjoyed the fine banquet tendered to them.

Representatives of Manufacturers and Jobbers in Attendance.

Joseph C. Henry, C. W. Hackett Hardware Company, St. Paul.
Geo. L. Nye, Minnesota Stove Company, Shakopee, Minn.
M. Canntreh, Western Supply Company, St. Paul, Minn.
O. V. Roberts, Roberts Heating & Ventilating Company, Minneapolis.
C. H. Cook, Cribben & Sexton, Chicago.
C. E. Healey, Kahn Bros.
F. I. Bourne, Rochester Stamp Company, Rochester, N. Y.
E. S. Ferguson, Minnesota Stove Company, Shakopee.
B. F. Nixon, E. C. Atkins & Co., Indianapolis, Ind.
M. L. Weinberg, Peninsular Stove Company, Chicago.
Leigh Pruden, Favorite Stove & Range Company, St. Paul.
E. J. Russell, Russell Bros., Stephens, Minn.
John Hatfield, Duffy, Trowbridge & Co.
John Straher, Rathbone, Sard & Co.
H. L. Babst, Moorhead Hardware Company, Moorhead, Minn.
E. H. Stranahan, Janney, Semple, Hill & Co., Minneapolis.
R. A. Wheeler, Black & Germer, Erie, Pa.
J. L. Heltman, Marshall-Wells Hardware Company, Duluth.
J. L. Hanson, Heath & Milligan Mfg. Company, Chicago.
C. S. Chatfield, C. A. Trowbridge.
H. C. Goeltz, Eclipse Stove & Range Company.
Wm. Taylor, American Steel & Wire Company.
E. H. Downs, Mississippi Valley Stove Company, Fulton, Ill.
A. D. Baughman, Janney, Semple, Hill & Co., Minneapolis.
H. McGinley, C. W. Hackett Hardware Company, St. Paul.
C. H. Skelton, Farwell, Ozmun, Kirk & Co., St. Paul.

Clark W. Kelley,

who has so successfully filled the presidency of the North Dakota Hardware Association since its organization and for the past year that of the Northwestern Association, was born in Theresa, N. Y., in 1855. While a baby his parents removed to Wisconsin, and he received his education in the public schools and Ripan College. In 1868, while still a boy, he commenced the Hardware business, learning the tinnern's trade and clerking until 1874, when he became a commercial traveler for Westphal, Hines & Co. of Dubuque, Iowa, and Wm. Blair & Co. of Chicago. His health forced him to leave the road, however, and in 1884 he moved to Devil's Lake, N. D., and opened a Hardware store. Recently he retired from business, selling his stock to Adams Brothers of Fargo. Mr. Kelley intends to devote his time in future to his large farming and banking interests. He is a Mason and for the past year has been deputy grand commander of Knights Templar of North Dakota. Mr. Kelley has been Mayor of Devil's Lake four years and made an efficient officer.

Henry B. Allen,

ex-vice-president of the North Dakota Hardware Association, was born in Northeastern Ohio, at Ellsworth, in 1847. His ancestors were Connecticut Yankees. Mr. Allen was raised on a farm, attending the district school in winter. Later he attended the Poland Union Seminary for several terms, after which for several years he

taught school during the winter and worked on the farm in the summer. At the age of 24 he married and moved to Salem, Ohio, where he engaged in the Hardware business for 11 years, when he sold out and removed to Jamestown, N. D., in 1883. The firm consist of R. A. Kirk of St. Paul, Minn.; H. B. Allen and his son, Paul N. Allen, the firm name being Kirk & Allen.

H. M. Joy,

treasurer of the North Dakota Hardware Association, is a native of Wisconsin and is 40 years of age. He came to North Dakota in the spring of 1882 and the following fall opened a Hardware store at Hamilton, and has since been continuously in business in that place. Mr. Joy is also senior member of the firm of Joy, Armstrong & Co. of Glasston, dealers in Hardware and Lumber. He is vice-president of the bank of Hamilton and has held various school and town offices. Mr. Joy served one term, 1896-1897, as a member of the House of Representatives of the State Legislature, representing the Second Senatorial District. Mr. Joy is Past Grand Master of the A. O. U. W. of the State and has twice served as representative to the Supreme Lodge of that order.

Charles N. Barnes

was born at St. Charles, Ill., May 20, 1863. When a child his parents removed to Chicago, where Mr. Barnes lived continuously until 1882. He received his education in the public schools of Chicago, later attending Allen's Academy. Following in the footsteps of his father, he desired to learn the Hardware business and obtained employment with the wholesale house of Brintnall, Lamb & Co., Lake street, remaining in their employ from 1879 to 1882. The latter year he went to Dakota (then a Territory) and secured a situation in Grand Forks with the Hardware and Implement firm of Luke, Steele & Co., and continued with same firm and their successors until 1889, when he was admitted as a partner, the firm name being Luke & Barnes. This partnership continued until 1898, when the business was incorporated as Barnes & Nuss Company. This firm conduct an exclusive Hardware business and also do a large business in general roofing and sheet metal work. Mr. Barnes has held the position of secretary of the North Dakota Hardware Association since its organization in 1897. He has always believed that much good could be derived through trade organizations. He was influential in forming and bringing about the North Dakota Hardware Association, and has devoted much of his time to the work of the organization.

The Peters Arms & Sporting Goods Company

of Cincinnati, Ohio, were incorporated on February 17, 1900, with a paid up capital of \$100,000, for the purpose of engaging in the business of wholesaling and retailing of Arms, Ammunition and a general line of Sporting Goods. The directors and stockholders of the new concern are Geo. M. Peters, president of the King Powder Company; O. E. Peters, president of the Peters Cartridge Company and treasurer of the King Powder Company; A. King, manager of the King Powder Company and the Peters Cartridge Company; J. H. McKibben, secretary of the King Powder Company and Peters Cartridge Company; Fred. C. Tuttle, treasurer Peters Cartridge Company; Geo. H. King, assistant general manager of the King Powder Company; A. L. Peters, manager of the St. Paul branch of the King Powder Company and the Peters Cartridge Company; W. D. Park, president of the Merchants' and Manufacturers' National Bank, Columbus, Ohio, and Howard C. Park, cashier of the Merchants' and Manufacturers' National Bank, Columbus. From these will be elected officers for the newly incorporated company, and will consist mainly of those at present active in the management of the King Powder and Peters Cartridge companies. Adam Holl, who has been identified with the Sporting Goods trade for the past 14 years, will be the manager of their retail sales depart-

ment. It will be noted from the list of stockholders given that the company start with exceptionally strong backing financially. The six-story and basement structure at 117 and 119 West Fifth street, opposite the United States Custom House and Post Office, has been leased for a term of years and is now being altered to suit the company's requirements, and when completed will be stocked with the most complete line of Sporting Goods to be found in the West, it being the intention of the company to be in position to fill any demands made upon them without delay.

Cash or Credit System.

THE following interesting paper in regard to cash business was presented by T. J. Lomas, Cresco, Iowa, at the recent convention at Des Moines, Iowa:

When I received Mr. Miles' request for a paper from me on the subject of cash or credit system of doing business, I answered in my own mind that I would not attempt it; that I had made a failure of the cash system, and would probably come out the same way with a paper to be read on that subject before this august assembly of Hardware wisdom and experience; but after considering it a bit I thought, suppose each one who has been asked to take a part in this meeting should say, "No, let some one more competent or some one with more leisure do the work," could we have an interesting or profitable meeting? How could we compare notes if there were no notes to compare? So I wrote Mr. Miles that I would try to write a short paper on that subject.

TWENTY-SIX YEARS' EXPERIENCE.

I have been in the Hardware and coal business in my present location for 26 years, so whatever else I lack I am not lacking in experience. I have been through the times of big wheat crops with the first settlers when we expected to trust everybody the whole year, or until they marketed their crops; and through the wheat failures when we saw our money slide into the Dakotas by the thousands between two days. Those were the times when I wondered whether we could not do a cash business and not run the risk of our debtors getting away between two days. Then I would look back and see merchants making a failure of conducting a strictly cash business, and so would fall back in the old rut, not daring to make such a radical move.

A CASH MOVEMENT LAUNCHED.

In July, 1897, my competitors came to me, and proposed going into a strictly cash business all of us, so that one would have no advantage over the other, one of them saying that they were going into it alone if we would not join. So we all agreed to post up notices that August 1 we would do a strictly cash business, and it seemed to be contagious, for other stores posted the same notices, and even some blacksmith shops; but the end of it all came. It died a natural death. Just when or how it died no one knows. My private opinion is that it commenced to die soon after it was born, and it died so gradually that it dried up and blew away without even a public funeral, and certainly without any expression of regret. Not one of us who was responsible for its existence has ever mentioned its name even to each other since. We do not mean to say that nobody can do a strictly cash business, but we do not believe that a man that is ambitious to hold and increase business, and has been in his present location for 15 to 25 years, can do a strictly cash business.

WHY IT FAILED.

Now, why was it given up? There were difficulties which arose that we had not anticipated, and some that we had expected loomed into insurmountable difficulties under the pressure of anxiety for more business, which, by the way, is the main stimulus to giving credit before we know the parties are worthy of credit. The system seemed to be going all right for a while. One of the first difficulties I ran across was a man running a farm on a salary. He wanted to let the bill run and

then pay it, and the bill would show what he had done. I told him we would give him a bill each time, and he could file them away, and he seemed partly satisfied, but soon failed to come around, so the inference was plain that he had found some place where his bill could run and so save him the trouble of caring for so many bills. Then we heard of one of our competitors selling a good customer some Fence Wire. When the Wire was loaded he said he would pay it soon. The merchant replied, "But, you know we are doing a strictly cash business." "Very well," the customer answered, "I have not the money with me to-day, so we will unload it." But in the nick of time the merchant pulled out his purse, and said: "Here, I will loan you the money to pay for the Wire." I had a customer who had traded with me 26 years. He said it might inconvenience him because he did not always have the money with him, and after a while he got caught that way and I loaned him \$25. Often some good responsible farmer would send in some one for something, promising to pay next time he came in. Sometimes, yea, a good many times, a farmer would come in and expect to pay until he had put his hand in his pocket. And then again there is the account with the county, township, city, the different school districts in the county, the road districts. They all must have bills come before them to be inspected before being paid. Some other corporations doing business through their employees want bills of account before payment. So I fired myself in the old rut of doing business, using my knowledge or passing judgment on each individual customer.

HOW THEY MANAGE IN ENGLAND.

About 11 years ago I went to England on a visit, and in talking with my uncle I made the remark, "Of course your business is all done on a cash basis." "Oh, no!" he said, "the merchants do a credit business, too;" and I said, "Why, I should think among so many dependent on wages they would close a great many of their accounts." "Oh, no!" was the reply, "if any failed to keep their accounts they were brought up before the magistrate and he would take evidence of what amount of wages was coming in each week from the different members of the family, and what it would take for the bare necessities, and then would order a certain amount of the week's wages to go toward paying the debt, and he would save a little for the indebtedness if it threw the family down to bread and water. And so, you see, people are careful how they contract a debt." This is what I call placing the responsibility of going in debt on the shoulders of the one wanting to go in debt to the extent of all his property except six months' provision for his family, and he will think twice before contracting a debt once. If he knows that the team he drives is liable for the debt he is contracting, he will wait until he is sure where the money is coming from to discharge the indebtedness. And such a condition of things would make a more industrious and economical class of those who at the present time live partly on beating other people.

PROFESSORIAL CRITICISM.

As an illustration of this: When I came back from England I was telling the professor of our high school about the wages in England; stonecutters, masons and carpenters, \$1.25 per day; laborers, 75 cents per day; flour a little higher than here, meat double the price, &c. He said my story did not hang together. It was as much as laborers could do to live in this country, so how could they live in the old country on lower wages and higher priced victuals?

HOW IT IS POSSIBLE.

I told him the difference was in the industrial habits and customs of the two peoples. In England a child was compelled to attend school until they could pass Government examination in the third grade, and any ordinary child could accomplish that at 12 years old, and from that time forth both male and female go into

some factory. So that if there was a family of man and wife and three girls over 12, there would be four earning bread for the table, whereas the same family in this western country would only have the father earning the bread for the table. This difference in the working force, and counting meat as a luxury only to be indulged in once, twice or three times per week, according to the purse of the family, very easily explained the apparent contradiction.

FIXING RESPONSIBILITY FOR DEBT.

If the State of Iowa will place the responsibility of going in debt on the one who wants to contract a debt, who should know whether he will be able to pay it when due, it will be a blessing to the community, a shifting of responsibility from the merchant to the debtor, and a blessing to the debtor class, for, in the first place, the community, as a whole, would be a more industrial, economical and provident people; the merchant could do business with less loss, and the dead beat, or the "man that the world owes a living," would be compelled to learn the lesson of industry, economy and providence.

I believe that business, as a rule, will continue to be done partly on credit. If you credit the corporate customer, why not the individual customer equally responsible? If the perfectly good individual customer, why not the individual customer you think is good?

AMENDMENTS TO GARNISHEE LAW.

The remedy in this matter is not to revolutionize business methods, but, as I said before, change the responsibility onto the shoulders of the one seeking credit. If he is reckless enough to contract debts which he cannot meet, let him suffer, not the man who grants credit, supposing him to be able to pay when due. There will not be so many dead beats when the law is changed so that a man cannot own 40 acres with a good house on it, team, cows, pigs, &c., and defy his creditors. I met a number who refused to sign the petition to change the garnishee law, on the excuse that it did not go far enough. I say, let Iowa make laws to protect business, not dead beats.

Letters from the Trade.

Our readers are invited to discuss in these columns questions of trade interest connected with the manufacture or sale of Hardware. We shall be pleased to have a free expression of opinion on subjects deserving the attention of Hardware merchants and manufacturers.

A Call for New York Retail Hardware Association.

The following communication from a Hardware house in New York City will be of interest, calling attention, as it does, to the desirability of forming an association of retail Hardware merchants:

I have been reading in *The Iron Age* for some time the reports of the retail hardware dealers' associations through the United States, and the thought has often occurred to me why we have no association in New York City, where there are more Hardware dealers than in some entire States in which members come for hundreds of miles to attend meetings.

I have spoken on this subject to salesmen who visit the trade, and the reply has always been, Mr. So and So and Mr. So and So spoke to me on the same subject, but they are all waiting for some one to start the movement.

If those desirous of forming an association will join with me in calling a meeting to start the society, I think it will be found that the majority of the trade are well disposed to an association.

The benefits accruing from such an association I do not think necessary to mention here, as I have no doubt that they suggest themselves to every intelligent reader.

BENJ. BAUM & Co.,
748 Columbus avenue, New York.

Method of Handling Orders.

The following communication has been received from a prominent house in the South who are anxious to change their system of handling their current orders, and particularly their back orders. They are desirous of becoming conversant with the best methods in vogue. This is an interesting subject and we shall be glad to have our readers describe systems which are regarded as satisfactory.

The following extract from our correspondents' letter explains the method they now employ and the undesirable features which they wish to eliminate:

We are now charging up our salesmen's orders, as well as mail orders, into a rough book, which is then taken to the bill department and the bills made out from same and a press copy of the bills taken. What we wish to get around is the rough book, and would also like to get the best system of handling back orders. We get orders this season of the year for delivery all during the summer. Some of the orders are of a special nature and for special machinery that has to be ordered out, and it makes quite a voluminous amount of work that has to be put on a rough blotter and then charged up again to another blotter. What we want is to get hold of the best system in vogue.

TRADE WINNING METHODS.

ANNOUNCING SPECIAL SALES.

The manner in which this is done by A. B. Ware, Opelika, Ala., is indicated in the accompanying cut, which shows in reduced size part of a circular recently issued:

WE ALL KNOW

And it's a known fact, that in doing a variety business on a large scale there will accumulate more or less remnants. And these odds and ends I dislike more than sin. Therefore, inasmuch as all buyers like bargains, I have concluded to offer some appreciative bargains during January, or, in other words, a starter for 1900.

JOB LOT No. 1

Assorted Hames, value from
to \$5.50 per dozen, will close

SPECIAL

Item
They are in broker
5 Double-Barrel F
4 Single-Barrel
7 Single-Bar
10 Huntin'
50,000 Er
75 Large
120 Med
70 Ax
20 V

The manner in which the different lots are presented is shown in the following cut:

JOB LOT No. 4

Padlocks, value 10 to 40c, close at 5c to 18c
Knob Locks, good value, 25c
Butcher Knives, good value, 5c to 33c

A variety of goods such as Wagon Material, Traps, Padlocks, Locks, Shears, Guns, Razors, &c., are similarly referred to with attractive prices.

A GOOD CIRCULAR

The following circular, issued January 10 by L. F. Stahler, Waverly, Ohio, will commend itself as direct, clear cut and interesting, and likely to make a pleasant impression on those to whom it is addressed. It will doubtless be suggestive to merchants who are on the lookout for good circularizing methods. It is printed on a letter sheet, at the head of which is a general description of the business, and a half-tone of Mr. Stahler. The text of the circular is as follows:

To our Friends and Patrons, Greeting:

For most of us January 1st, 1900, begins a new century. Some expert mathematicians, college professors and scientists dispute it, and furnish reasonable proof for their conclusions, nevertheless busy people will accept it as a matter of convenience.

For the past thirty-two years the house which I have had the good fortune to succeed has been a representative business concern in Waverly, and looks back upon its record with just pride and satisfaction.

ESTABLISHED IN 1867 BY DAVID STAHLER, Sr., it has come down to us through several successions, and in the future the firm name will be L. F. Stahler.

Satisfied by long experience that right methods insure a full measure of success, we start into the new century self-reliant and confident. The distinctive character of this house will be rigidly maintained, which is its fixed purpose to offer for sale the best material obtainable for the purpose in every department.

May 1900 bring to you and yours the blessing of increased prosperity.

Thanking you very kindly for your patronage in the past, and soliciting your future trade,

Yours very truly,

L. F. STAHLER.

Successor to Stahler Bros.

New England Iron and Hardware Association.

THE New England Iron and Hardware Association held their monthly meeting at Young's Hotel, Boston, Friday evening, February 23. The meeting was largely attended and a number of speeches were made by members of the association that showed confidence in present prices and a determination to maintain them. Interesting addresses were made by the following members: H. C. Bangs, Oscar A. Shepard, Samuel A. Bigelow, Leon C. Carter, Charles Clark Adams, William Chamberlain, W. Q. Wales and Peter E. Strauss.

It appeared to be the unanimous opinion of the speakers that jobbers and retailers should use every effort at this time to maintain present prices and to avoid cutting on the strength of unreliable information. It was also advocated that inventories should be taken on the basis of existing prices rather than on the actual cost of goods, if the latter was on a lower basis than prices prevailing to-day.

Price-Lists, Circulars, &c.

THE PORT CHESTER BOLT & NUT COMPANY, Port Chester, N. Y.: 1900 catalogue and price-list. The goods included are Bolts, Washers, Nuts, Turnbuckles, Cap Screws, Set Screws, Iron Work, Forgings, &c.

THE FOX CUTLERY COMPANY, Dubuque, Iowa: Catalogue of the Fox Razors. A large line of Razors is shown in this catalogue, comprising various patterns of finishes of blades as well as a large variety of Handles. The illustrations also cover Shaving Cases, of which the company make a number of styles. All Razors which they make bear the Fox trade mark.

THE HANDY LADDER WORKS, Cleveland, Ohio: A pamphlet illustrating and describing the Handiest Step Ladder.

ATLAS TACK COMPANY, Taunton, Mass.: Pamphlet giving net prices on Shoe Finders' Goods for export. It covers Shoe Nails, Hand Shoe Tacks and Eyelets.

CHARLES E. WHEELER, Farmington, Maine: A descriptive circular and price list of Split Bamboo Fishing Rods and Net, Staff and Bow.

CRESCENT BRASS & IRON COMPANY, Detroit, Mich.: Illustrated catalogue D. Descriptions and prices are given of Lawn Sprinklers and Hose Goods.

WALBRIDGE & CO., Buffalo, N. Y.: A catalogue illustrating, with descriptions and prices, Iron Reservoir Vases, Chairs and Settees. These goods are shown in a variety of forms.

Missouri Retail Stove and Hardware Dealers' Association.

GRATIFYING progress has been made by the Missouri Association during the first year of its existence. The membership was shown by the secretary's report to have increased 50 per cent., while further additions to the enrollment were made at the sessions of the second annual convention held at the Lindell Hotel, St. Louis, on the 20th, 21st and 22d inst. The list of members presented by the secretary on the first day of the convention was as follows:

Abell & Loomis, Meadville.
 Bodine, C. T., Shelbyville.
 Best Bros. Hardware Company, Palmyra.
 Berghauser, W. E. & Co., Fulton.
 Burge, J. F., St. James.
 Boehl Hardware Company, St. Louis.
 Bolte Stove Company, St. Louis.
 Bannon & Co., J. F., St. Louis.
 Bethany Hardware Company, Bethany.
 Berhears & McCarroll, Vandalia.
 Batta, Jos., Marceline.
 Beegle, J. G., Warrensburg.
 Brune, Chas., & Son, New Haven.
 Cottey & Payne, Cameron.
 Cunningham, Hamel Mfg. Company, De Soto.
 Clark, R., Hardware Company, Kirksville.
 Campbell Bros., Bowling Green.
 Cole & Hamilton, Bethany.
 Demeter, E. E., Macon.
 Deikbrader, H. J., Washington.
 Drake, A. M., Carthage.
 Easterday & Pemberton, Braymer.
 Frier, Taylor, Louisiana.
 French, J. M., Skismore.
 Froher & Terill, Fulton.
 Ferris & Cauthorn, Mexico.
 Groom, L. D., Richland.
 Gruendler, A. H., St. Louis.
 Gischwinder, A. F., St. Louis.
 Grant & Jewett, Shelbyville.
 Hixson, R. L., Hannibal.
 Herring, Louis, Blackburn.
 Hoff-Taylor Hardware Company, Chillicothe.
 Halyard Hardware Company, Joplin.
 Haus, F. P., Iberia.
 Harper & Munsell, Cameron.
 Hawkins & Sanderson, Bowling Green.
 Hudson, W. H. & J. E., Marysville.
 Jones & Son, E. LaBelle.
 Joplin Hardware Company, Joplin.
 Jackson, J. T.
 Jones & Farwell, Granger.
 Johnson, O. W., Marshall.
 Jamison, Geo., Gower.
 Kansteiner, F. A., St. Louis.
 Kansteiner, W., Hannibal.
 Kenyon, J. M., Maitland.
 Koenig, H. G., St. Louis.
 Kute, M. & Bros., St. Louis.
 Keyes, J. W., Fredericktown.
 Key, C. M., Nevada.
 Loepppe, Chas., St. Louis.
 Lewis Bros. Hardware Company, McFall.
 Morris, Ben, Memphis.
 Mound City Hardware Company, St. Louis.
 McElyea & Medley, Campbell.
 Miller, Ulen & Carter, Dexter.
 McGiveney, Peter, St. Louis.
 Mitchell & Scholes, Grundy.
 Moelhoff & English, Stanberry.
 Moyo, T. R., Clifton Hill.
 Mayer, Frank, Hardware Company, Macon.
 Nelson, Joseph, Winfield.
 Nauerth & Queenberry, Slater.
 Naylor & Co., B. F. & H., Marshall.
 Norris Hardware Company, Kansas City.
 Potts, M. C., Brookfield.
 Potts, Wm., Salisbury.
 Pauly & Co., St. Louis.
 Parrish & Co., St. Louis.
 Parrish-Enkson Hardware Company, St. Joseph.
 Poland & Crouch, Carrollton.
 Russell & Son, Troy.
 Reiss, John, St. Louis.

Rumpel, W. & W. J., Weston.
 Schmitt, John, St. Louis.
 Skewes & Co., Neosho.
 Steilmeyer Hardware Company, St. Louis.
 Sedalia Hardware & Grocery Company, Sedalia.
 Salamon & Biederman Hardware Company, St. Louis.
 Sodemann, Wm., Concordia.
 Spellman, H. A., St. Louis.
 Seelen, Wm., Moberly.
 Slauson & Kingston, De Soto.
 Shoot, W. T., Richmond.
 Trau, Frank, Holsteen.
 Thomas, E., Trenton.
 Vogt & Co., J., Concordia.
 Windermuth, Chas., St. Louis.
 Wachter, Emilio, Son, Hardware Company, St. Louis.
 Witte & Enright, St. Louis.
 Walker & Eberto, Plattsburg.
 Yates Bros., Pattensberg.

New Members.

The following new members were secured during the convention:

J. B. Corrigan, St. Louis.
 Weigert & Bishop, Kansas City.
 J. H. Ruhling, Kansas City.
 John May, St. Louis.
 R. W. Griffith, Sedalia.
 J. C. Ely, Macon.
 E. B. Drew, St. Louis.
 George E. Clark & Son, Lutesville.
 R. J. Rankin, Hannibal.
 R. W. Backenstoe, Norborne.
 Read & Co., Vandalia.
 J. G. Webber & Son, Clayton, Mo.
 J. P. Dutton, St. Louis.
 J. W. Stilwell, Carrollton.
 Frank L. Shoop, St. Louis.
 W. L. Trimbelle, Liberty.
 H. F. Wright, Lebanon.

A large representation of the membership was in attendance, as well as numerous gentlemen connected with manufacturing and jobbing interests. Consequently enthusiasm and inspiration, which can only be evoked by the presence of numbers characterized the proceedings, greatly encouraging the officers and active workers of the association. More vigorous growth is therefore expected during the coming year. Tuesday morning was devoted to the registration of members and the payment of annual dues. A meeting of the Executive Committee was held at this time, to arrange details of various matters which were subsequently laid before the convention.

TUESDAY AFTERNOON.

The convention was called to order at 2.15 by President J. W. Poland of Carrollton, who expressed his pleasure in again being enabled to meet his fellow members, and proceeded to read his official report, as follows:

President's Report.

Gentlemen: It is not necessary for me to review the history of this organization, as it is fresh in the minds of all. As soon as practicable after the close of our last session, and in accordance with section 4, article 4, of our laws, I appointed field workers. I called the Executive Committee to meet in the city of Moberly November 15, but as there was not a quorum present no definite business was transacted. However, such matters were projected and afterward consummated by mail.

Our time of meeting was set for the first Tuesday in February, but, being unable to secure satisfactory rates for that date, by the consent of the Executive Committee I postponed our meeting until this date.

OBJECT OF ASSOCIATION.

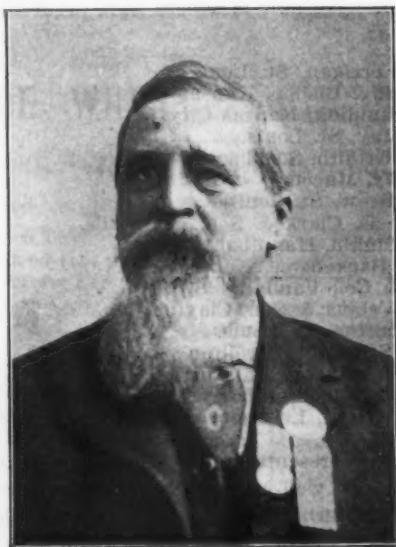
The great object of our association is to cultivate more fraternity and co-operation among ourselves. When we act upon the theory that our competitors are as honest as we and have the same purposes as ourselves we shall have learned a valuable lesson.

In the social world there are certain great principles that are regarded as fundamental to the best interests of mankind, and the penalty attached to the violation of these principles is the loss of the respect of the best people.

So in the business world we should endeavor to cultivate such feelings of fraternity as will put into practice these great principles. In the cultivation of these principles we must learn that so long as we expect right motives and right dealing from our neighbors, we must not overlook the fact that our neighbors have a right to expect the same from us.

HOW TO ACCOMPLISH RESULTS.

To accomplish this end we are convinced that there is a growing feeling among the trade that this is a better plan by which to correct evils than to attempt to legislate them out of existence. We have a grand opportunity before us in bettering our own condition as



P. E. HARNEY, President.

retail Hardware dealers, and being a blessing to the business world as well. I would that I had the ability to enthrone every retail Hardware dealer in the great State of Missouri with the importance of this work as I myself feel it, and I sincerely hope that the day may soon come when all the dealers of the State may be members of this association.

A NATIONAL ASSOCIATION.

Allow me to urge upon you the importance of sending a representative to the conference of the various State associations to meet in the city of Chicago March 12, 1900, for the purpose of discussing the advisability of forming a national association.

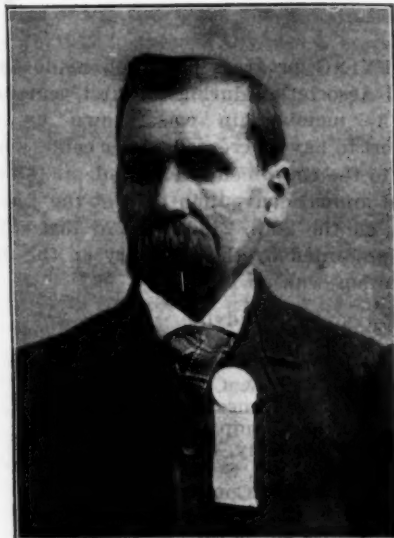
TRAVELERS APPRECIATED.

In this address I would not omit the proper recognition of the valuable services of the traveling men, for to their untiring efforts, more than to any other influence, is due the growth of our organization during the past year. I desire at this point to express my confidence in the ultimate success of this association. But in order to do this every individual member must be loyal to the will of the majority.

SINGLE PRESIDENTIAL TERMS.

In conclusion I desire, as your retiring president, to say (for I am in entire accord with the sentiment expressed by President Montgomery of the Wisconsin

State Association when he said, "It should be an unwritten law that no president should succeed himself"), that I trust this convention may be so conducted as to conduce to the benefit of the association, and that, while we hope to increase our social acquaintance and good



B. F. NAYLOR, Vice-President.

will, we should in no sense subordinate the business of the convention to that of having a good time.

Secretary's Report.

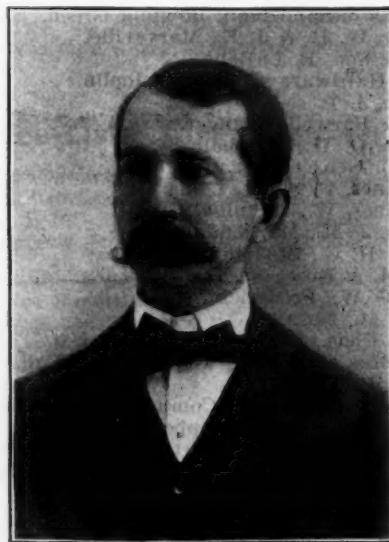
The secretary then presented his report, as follows:

In presenting this, my first annual report, I wish to take the opportunity of thanking the association for the honor conferred upon me at the last meeting in selecting me as secretary of this association.

Notwithstanding our membership has not increased as rapidly as I expected, yet when I observe the reports of the secretaries of other State organizations I cannot see many reasons for complaint.

MEMBERSHIP INCREASED FIFTY PER CENT.

Our association has increased its membership from 64, at our last meeting at St. Louis, April 11, 1899, to 96



E. THOMAS, Secretary-Treasurer.

at the present time, which is a satisfactory showing when we take into consideration the fact that our last meeting at St. Louis was the beginning of the organization proper.

HOW TO GET STATE LIST OF RETAILERS.

The work of your secretary has not been very arduous outside of the work of sending out circular letters

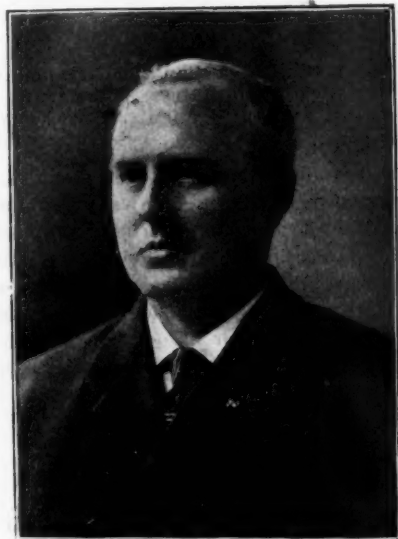
to about 650 of the retail Hardware dealers of the State. To do this he had to secure a list of retail dealers, which was an exceedingly difficult matter; especially to get a correct list. To enable your secretary to get such a list I would recommend that each member of your Executive Committee send a full list of the dealers in his district to the secretary, when he can enter the same in alphabetical order in a book for that purpose. By this means every dealer in the State can be reached directly on short notice.

I wish to return my thanks to your excellent president for his hearty co-operation and valuable assistance in the work; and I also cannot forget the willingness of the several Hardware magazines and journals to give us their valuable aid.

Your Executive Committee has held one meeting since our last convention, and that was held at Moberly, Mo., November 15, 1899, for the purpose of taking steps looking to the pushing of the work of increasing our membership, the minutes of which have heretofore been read.

TRAVELERS AS CANVASSERS FOR MEMBERSHIP.

The suggestion adopted of enlisting the traveling men in our cause is a good one, but the action was taken too



J. W. POLAND, Ex-President.

late to bear good fruit, as it was very difficult for your secretary to get the proper addresses, and the number of said traveling salesmen who were representing the different firms suggested, in time for effective work, in lieu of which your secretary with each circular letter sent a blank application for membership. I would respectfully recommend that only such traveling salesmen as belong to this association be authorized to solicit members, and I am confident it will work for the good of the association, in that they being a part of it will take more interest in the success of the association. With our present membership the interest will be renewed, and we are now in position to push the organization with more vigor.

SUCCESS CONTINGENT ON MEMBERSHIP.

The success of this association depends very materially on the number of its members, and each year will evidence a more rapid growth. It will require constant effort to make it a success, but it can be done. What the other States have done, grand old Missouri can do, and when the proper time comes the several States can unite their efforts and then it will be seen what benefits are to be derived from our organization.

LETTER FROM JOHN BINDLEY.

In reply to an invitation sent to John Bindley of Pitts-

burgh, Pa., president of the National Hardware Association, I received the following letter:

PITTSBURGH, January 16, 1900.

Your courteous favor of the 10th inst. is to hand, with an invitation to address your association at its second annual meeting in St. Louis, February 20.

Unfortunately my engagements are of such a nature that I find it will be impossible to be with you upon this pleasant occasion. The aims and objects of the National



TAYLOR FRIER, Member Advisory Board.

Hardware Association are almost identical with your own association. It means the uplifting and the bettering of the conditions of trade, striving to attain a higher understanding of the true ethics of doing business between competitors. The commingling each with the other cannot but be helpful, as well as bringing about a better understanding between the individuals. May you continue in your good work, with ever increasing beneficial results, until you attain the high position you are striving for.

With best wishes, and regrets that I cannot be with you upon this occasion, I remain, Yours truly,
JOHN BINDLEY, President.

LETTER FROM SECRETARY FERNLEY.

I extended an invitation to T. James Fernley of Philadelphia, secretary of the National Hardware Association, to address this convention on the best methods of organizing State associations, in reply to which he sub-



HARRY G. KOENIG, Member Advisory Board.

mitted the following, which I submit for your consideration:

PHILADELPHIA, January 13, 1900.

I am in receipt of your valued favor of the 10th extending an invitation to attend the second annual meeting of your association in the city of St. Louis, on February 20, and to make an address before your association on "The Best Methods of Organizing State Associations," but regret that my engagements at that particular time are of such a nature that it will be impossible for me to accept your very courteous invitation.

The objects to be attained by such organizations as yours and our own are to all intents and purposes identical. We are all striving to attain a higher standard of business methods. Results can be accomplished by organized efforts which would simply be impossible through individual action. This will be written in history as an era of organization. The advantages to be attained by an organization like yours are as manifold as they are manifest. I don't know that I could be of much advantage to you were I to address you on the subject of "Best Methods of Organizing State Associations," as I have never had any experience in that particular direction.

My impression, however, is that those who are cognizant of the advantages of an association like your own should be appealed to through literature circulated from your secretary's office, and this should be followed up by personal visitation by some one authorized to solicit membership for you.

If the traveling salesmen of your State are interested



J. M. KENYON, Ex-Member Executive Committee.

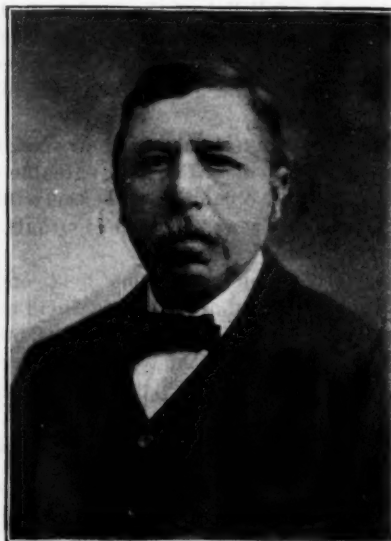
In the aims and objects of your organization, they can do a great deal toward aiding your officers in securing a satisfactory membership.

I do not know what proportion of the retail dealers in your State are now members of your organization, but I assume that already as an organization you are strong enough to have your influence felt wherever exerted. This being the case, you undoubtedly will be able to make considerable progress and thereby be in a position to demonstrate to those who have shown a disinclination to connect themselves with you that they are doing an injustice, not only to those of their competitors who are willing to devote the time and assume the financial responsibility necessary to obtain beneficial results from associated effort, but that they will realize that they are doing themselves an injustice to remain in a position where they are unable to obtain such advantages as would accrue only to such concerns who are members of your association. In movements of this nature we find two classes of men who remain outside of an organization. 1. Those who are chronic pessimists, and who do not believe that conditions can ever change; and 2. those who are penurious enough to endeavor to obtain advantages without contributing their share toward the expense.

There is an immense field of usefulness open for associations like your own. The trade of the legitimate retail dealer is having serious inroads made into it by the catalogue houses and department stores, and we have been doing our utmost during the past two or three years to minimize this evil.

We bespeak for your association every measure of success possible, and sincerely hope that all the retail dealers eligible for membership in the same will avail themselves of the opportunities you offer. This is an era of organization, as I have stated before.

If the writer were privileged to address you personally he could not say more than is here indited. You have a powerful force to combat, and need all the assistance possible to be rendered; and I think that you will



W. E. BERGHAUSER, Ex-Member Executive Committee.

find no more willing ally than the National Hardware Association of the United States. Yours truly,

T. JAMES FERNLEY,
Secretary-Treasurer.

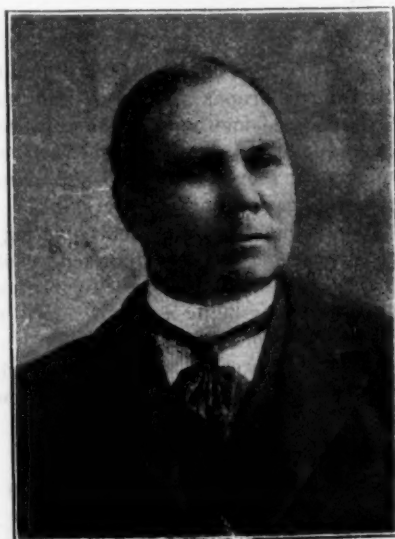
I also received a communication from H. A. Cole, president of the Iowa Retail Hardware Dealers' Association, asking for the consideration of a proposition looking to the organization of a national association of the retail Hardware dealers. This communication I presented to our Executive Committee for its consideration.

Being treasurer of your association I wish to make my report in connection with my report as secretary, as follows, to wit:

TREASURER'S REPORT.

Receipts.

April 12, 1899, to membership fees received at last meeting.....	\$192.00
February 14, 1900, to membership fees received to date.....	90.00



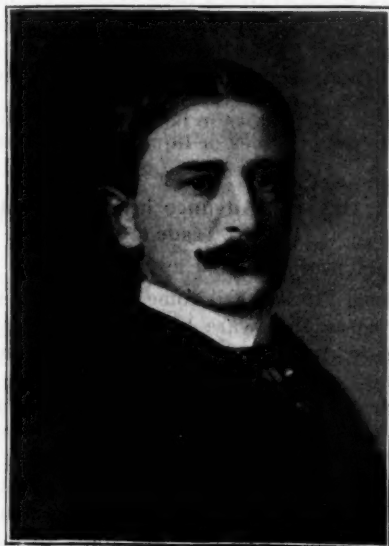
L. D. COTTEY, Ex-Member Executive Committee.

February 20, 1900, to membership fees received to date.....	6.00
February 20, 1900, to dues paid to date (six members.)	14.00
Total	\$302.00

Expenditures.

To amount paid at last meeting for postage, printing, &c.....	\$45.25
To amount paid for postage.....	28.00
To amount paid for printing and stationery.....	30.85
To amount paid for stenographer fees and clerical work.....	15.95
To amount paid for stenographer fee at last convention.....	7.50
To amount paid on commissions to solicitors.....	3.50
To amount paid for telephone message.....	.40
To amount paid for badges for this convention....	20.40
To amount paid for express.....	.55
	<hr/>
	\$152.40
To amount cash on hand.....	249.60
	<hr/>
	\$302.00

After adopting the report, the president announced as the next order of business the election of officers for the ensuing year. L. D. Groom of Richland moved that



ED. A. DEMETER, Ex-Member Executive Committee.

the chair be empowered to appoint a committee of three to nominate officers for the association. The motion was carried, and the chair appointed M. C. Post of Brookfield, F. C. Kansteiner of St. Louis and J. B. Best of Palmyra.

It was moved that a committee of three on rules and order of business be appointed, and the motion was carried. The chair appointed C. E. Bodine of Shelby, Ben Morris of Memphis and J. F. Bannon of St. Louis. W. F. Halyard of Joplin, A. H. Gruendler of St. Louis and Wm. Sodeman of Concordia were appointed Committee on Credentials.

The secretary read the minutes of the last annual meeting, as well as the minutes of the Executive Committee meeting at Moberly, Mo., November 15, 1899.

The Executive Committee recommended that a committee of three be appointed to revise the constitution and by-laws on the lines laid out by the committee. A motion was made to that effect, which was carried, and the president appointed as Committee on Revision of the By-Laws, Taylor Frier of Louisiana, L. D. Groom of Richland and E. E. Demeter of Macon.

B. F. Naylor of Marshall read the following paper:

Mr. Naylor's Paper.

The retail dealers of the State of Missouri are not unlike those of any other State. Our desires and aspirations are very much alike. We, however, have one peculiarity in that "You must show us," and that is just what we would like and earnestly desire to do in this discussion.

That organization is necessary to-day on the part of retail dealers is apparent to every intelligent thinking man. This is evidenced by the commendable zeal mani-

festes on the part of retail dealers in many of our sister States. We, in Missouri, as yet have not been as enthusiastic as the exigencies of the terms demand, and yet we are moving in the right direction, and as we progress, hope to gain force and momentum.

UNITED EFFORT.

About one year ago we organized the Missouri Retail Stove and Hardware Dealers' Association, believing such an organization was demanded to meet conditions and circumstances confronting the retailers of this State—not that we might change or reverse the order and progress of commerce to suit our own interests—but through its instrumentality in her council halls discover, if possible, how to adjust our affairs and business to meet these conditions, and remedy many of the evils now afflicting us and opposing our progress. As individuals we cannot bring about needed reforms; our efforts fall at our feet. We petition, we protest in vain. Then our only recourse and remedy is in united effort. When this is accomplished, when we stand shoulder to shoulder as one mighty force, then our right to a place in the commercial world will not be questioned, but revered and respected, not only by manufacturers and jobbers, but by the catalogue houses and department stores as well.

We must maintain our identity through organization, or go down in ruin and defeat. Which shall it be? The answer lies within your own reach and grasp.

Our association, whose object and aim is the promotion of every interest of its members, offers you the remedy, will you apply it?

Retail dealers, think on these things; they are of vital



LOUIS HERING, JR., Ex-Member Executive Committee.

importance to you and demand your careful consideration and support. In our annual gatherings, in the exchange of ideas, methods and plans, which will be discussed, the fraternal feeling and fellowship encouraged and fostered, who can estimate the benefits that will result?

Therefore our association appeals to every retail dealer in the State, inviting you into her ranks and bidding you welcome to all her privileges.

Discussion.

F. P. Haus of Iberia addressed the meeting as follows: I have been listening to the remarks on this paper and several previous papers regarding organization, saying this is a day of organization, as if it was something new. I am afraid that you gentlemen have not been reading your Bible very carefully, or you would find that organization is as old as the Bible itself, and it is very appropriate that a traveling man should give you a Bible story about organization.

If you have studied your Bible you will read this, that when the children of Israel returned from captivity

under Zerubbabel, by the decree of King Cyrus of Babylon, after they had gotten to Jerusalem, Nehemiah sent to see how they were getting along, and the word came back, "Oh, they are in a bad fix; the walls have been broken down and the gates have been burned with fire, and the enemy can come in and overcome them." Nehemiah did some praying, but he did not stop at that. He went to the King and asked permission to rebuild those walls. The first thing he did after he got there was to organize, and if you have studied your lesson closely you will find he appointed about 37 different chairmen of committees, heads of different families, or clans, and each party was set to rebuild the wall in front of his own door. Well, before they got to building, somebody says: "What is the use, the armies of the children of Israel are weak, and there is much rubbish about; we had better not try it." Somebody at the outside says, "You had better drop that, or the first thing you know these outsiders will come and wipe you out, and will not leave you the walls you have got there."

Nehemiah stuck to it, "You build that portion of the wall in front of your own door." All the bluster from the outside did not stop him.

In a very short space of time the walls were rebuilt. Now, then, let me say, what has that got to do with you? As the preacher draws a lesson, I want to draw a lesson. Somebody has sent down to find out how the Hardware trade is getting along in our Jerusalem, that is Missouri, and the reports came back that the walls were knocked down; what used to be the Hardware trade has now gotten into the hands of the racket store and the department store; we ought to have these walls built around here. We have started just as Nehemiah did to rebuild those walls. One of the first things is to organize. So you have nothing new, that organization went away back there. The next important thing is to build up the walls before your own door. That means this, that each one of you, gentlemen, as Hardware dealers should build up a piece of wall in your own town. Many of the retail dealers have said, "These racket stores are too large to get away with," and the outside enemy says, "These trusts are too big; these jobbing houses are too big, and the first thing you know they will swoop down upon you." Don't be afraid, stick right to it and build the walls in front of your own house, in your own town, and if you will stick together and organize, no better than they organized in the days of Nehemiah, this association will be a success.

Election of Officers.

The president asked the Committee on Nomination if they were ready to report.

The committee put in nomination J. W. Poland, Carrollton, for president, and P. E. Harney of Joplin for vice-president. After some discussion, and a positive refusal to accept a re-election by Mr. Poland, the matter was referred back to the committee for another report. Subsequently they nominated P. E. Harney of Joplin for president, and B. F. Naylor of Marshall for vice-president, who were unanimously elected.

Mr. Harney then took the chair, and the secretary read the report of the Committee on Rules and Order of Business, consisting of a programme for each session. On motion the report was adopted as read.

The next order of business was a paper by Clark W. Kelley, president of the Northwestern Association, Devil's Lake, N. Dak., but owing to illness Mr. Kelley was not able to attend the convention or prepare a paper.

Committee on Revision of the Constitution and By-Laws

made their report. A number of changes were suggested, and after some discussion the report of the committee was adopted, and the following changes made in the constitution and by-laws:

Section 1, Article III of the constitution to read as follows:

The officers of this association shall be president, vice-president, secretary and treasurer, and four members, no two of whom shall be chosen from the same Congressional district, who, with the president, shall constitute an Executive Committee. There shall be selected annually five members, known as an Advisory Committee, whose duty shall be to advise with the president and Executive Committee concerning the interests of this association and its members.

Section 2, Article III, to read as follows:

The president, vice-president and Advisory Committee shall be elected annually by ballot, and shall hold office until their successors have been elected and qualified. The Executive Committee shall be elected alternately by ballot, two for one year and two for two years.

Section 1, Article IV, to read:

The regular meetings of the association shall be held annually at such place as may be designated by the association at its previous annual meeting, and at such time as recommended by the Executive Committee.

Section 2, Article IV, to read as follows:

The Executive Committee is subject to the call of the president, and when so called their actual expenses shall be borne by the association.

Article I of the by-laws, to read as follows:

The membership fee shall be \$3, and the annual dues \$3 for each year thereafter.

Article VI of the by-laws to be abolished. This article prohibited the use of wines or liquors at banquets of the association.

What Effect Has the Advance in Prices Had on the Retail Trade?

This subject was discussed as follows:

J. G. Webber: It has had some effect upon us. Our builders tell us as Hardware has gone up a great deal they are disposed to wait to see if it will not come down. To that extent it has injured the trade.

Taylor Frier: We find it has a very bad effect upon our trade in some respects. Especially we find that is the case with Barb Wire and Plain Wire used by the farmers in making fences. I don't suppose that we have sold one-third of the amount of Barb Wire we did previous to the advance. The farmers say they are going to make rail fences and things of that kind. You know the price of Wire has increased more than 100 per cent. We did retail it at \$1.90. Now we are asking \$4.50 to \$4.75. Take it in Builders' Hardware. To a certain extent it has kept back building. It curtails our sales, though we must admit at the same time that the increased profit on goods we have sold has more than made up for what we have lost in lack of trade.

B. F. Naylor: We have felt the effect of the advance. Our firm does not deal in Barb Wire, and we cannot speak from that point. In Builders' Hardware we believe the advance has been the means of preventing a great deal of improvement that would have been made had there not been an advance. As Mr. Frier says, the additional profit upon the goods which we have sold to some extent offsets the loss of trade, yet that does not come as very much relief. While we get additional profit on the goods when they are sold, when we buy again that profit is absorbed. There is no doubt but that the advance in the price of goods has prevented our selling to the trade many goods we could have sold otherwise. When a man needs a Cook Stove he will generally buy it regardless of the price; he is forced to buy. With the high prices now asked buyers are inclined to buy cheap Stoves.

L. D. Groom: I believe the advance in prices has given us more business. I know the last half of the year my business increased \$500 a month over anything I had done for four or five years. I ordinarily sold \$4000 worth of Wagons. This last year I sold \$5000 worth of Wagons. I don't know but that it is easier to sell Nails at \$4.50 than we did a year ago at \$2.50. I believe that higher prices stimulate men to do more business.

J. M. Kenyon: I think the advance has caused us to sell less goods. You will find that a large part of the profits was due to the advance in goods on hand; but as a permanent matter it will make sales much smaller.

President Harney: I will tell you my experience. We sold more goods in 1899 than we ever sold before. There has been no trouble about getting prices. A few years ago when a person sold a hundred dollars' worth of goods you had to have the wagon come around to the back door to load it. Now you can put \$400 or \$500 worth in a wheelbarrow. People appear to be more willing to pay high prices this year.

The convention adjourned, to meet at 10 o'clock the following morning.

Theatrical Entertainment.

The members were provided by the Entertainment Committee of the St. Louis Retail Stove and Hardware Dealers' Association with tickets for a theatrical entertainment in the evening, which they greatly enjoyed.

WEDNESDAY MORNING.

The convention was called to order by President Harney, at 10.30, and Mr. Best of the Committee on Nominations announced that they were now ready to complete their report, as follows:

For members of the Executive Committee: J. W. Poland, Carrollton, one year; W. T. Shoop, Richmond, one year; R. L. Hixson, Hannibal, two years; F. A. Kanstelner, St. Louis, two years.

For members of the Advisory Board: M. C. Post, Brookfield; F. Neudorff, St. Joseph; Taylor Frier, Louisiana; G. A. Pauly, St. Louis; J. G. Koenig, St. Louis.

On motion the report was received and the gentlemen named duly elected.

The secretary read the report of the Auditing Committee to the effect that they had examined the records of the secretary and treasurer and found them correct. The report was approved.

Remarks of E. M. Bush.

E. M. Bush of Evansville, Ind., was called upon for some remarks, and addressed the convention as follows:

I am not a speech maker and I feel considerable embarrassment in trying to say anything to this company of Hardwaremen, but perhaps I can tell you something of our State organization and of our meeting at Evansville. We organized less than a year ago, and we had our second meeting last week. We had in attendance about 75 persons. We anticipated many more, and probably would have had two or three times that number but for the fact that the Indianapolis papers got out the report that smallpox was prevalent in the State, and I received many letters from those intending to go asking about the facts. I tried to set the matter right, but somehow it got out through the State that there was smallpox in Evansville, and the consequence was that we had no larger an attendance. But we had a very enthusiastic meeting indeed, and I think every one went away feeling repaid for having come. As you know, we are down in the southern part of the State, but we had members attending from the northern part of the State, almost within sight of Chicago. One good thing I feel this association does is getting the local members together, and getting us to realize that our competitor is not such a rascal as we are in the habit of thinking he is. In my city we have eight retail Hardware dealers, and I know that I had not been in the stores of two or three of my competitors two or three times until this meeting came about. I went in—they were not members of the association—going in to solicit them to become members, I found them to be very nice sort of fellows, and before this meeting was over every Hardwareman, with one exception, in the city, became members of the association, and one of the gentlemen made the suggestion that we found that the other fellow was not such a rascal as we thought he was, and that we might get together and have some understanding about the staple goods we had been selling, as, for instance, Wire on a profit of 5 cents per 100, and Nails pretty near in the same fix. There had been nothing of the kind done, but

this meeting brought us together in such a way that I think we can get together and have an understanding upon some few goods.

One thing that I tried to impress upon the members, too, was that they should take a trade paper of some kind. We found that a good many of our members were not taking them. Quite a number have been brought into our association by seeing reports of these associations. Perhaps you gentlemen in Missouri are more advanced in this regard than we are in Indiana.

Another step that we took was the appointing of delegates to Chicago, for a meeting there on the 12th of next month, looking to the organization of a national Hardware dealers' organization. I presume you gentlemen have been invited to do the same thing, and probably have made your appointments. If not you certainly ought to do so, because I feel that the success of our State organizations depends upon the establishment of a national organization. I think that we can work very much more effectively with a national organization than without one.

The secretary read a letter from J. W. Emery of Quincy, Ill., president of the Western Stove Manufacturers' Association, in which he said that he regretted his inability to be present and deliver the paper assigned to him on the programme, but that imperative business had required his presence elsewhere.

Question Box.

The President: Gentlemen, I have before me several questions from the Question Box. The first one I find is, "Should we loan Tools?" We would like to hear it discussed. We all recognize the fact that Hardwaremen have Tools to sell and not to loan. That is what he buys them for. If I went to a manufacturer and asked him to loan me a Stove he would think I was crazy, but we get such a request every day in the year in the retail Hardware business.

The Secretary: On that question I don't think there is much room for argument.

HOW CAN WE KEEP A TINNER FROM LOSING TOOLS?

A Member: Charge him up with them.

Mr. Naylor: It is a question that every man who employs a tinner would like, if possible, to know, just how to prevent a tinner from losing Tools. I have a tinner, in fact two of them, part of the time, and it takes one man after a job is finished to go around and gather up the Tools. I find it a source of considerable loss to the merchant.

Mr. Groom: I never have had much experience in the loss of Tinner's Tools, but the question reminds me of an incident that occurred a few weeks ago in our town. Mr. Groom related an amusing story of one of the Hardware merchants of his town who had left a new Stove at a customer's house, and who placed Snips and a Wire Cutter in the fire pot of the Stove, expecting his tinner to put the Stove up. In the meantime the man of the house came home, set the Stove up, built a fire and did not notice the tools in the Stove. The result was the tools were completely ruined. Continuing, Mr. Groom said: So it is not always the tinner that is to blame.

WHAT IS THE BEST WAY OF MEETING UNFAIR LOCAL COMPETITION?

Mr. Webber: It strikes me that that is in a nut shell the object of this association. It is a question that concerns all of us. I am bothered with competition from grocery houses, who in order to place their groceries will oftentimes sell Hardware at cost. It is really a question how to combat that competition. We cannot get back at them with groceries, because we do not carry groceries. It is a hard matter to say just what to do; we do not like to be antagonized with each other; we want to be friendly, but it is an unfair way of doing business, and I have been revolving in my mind as to what this association can do and to what extent we can benefit ourselves, and it seems that we ought to insist upon the houses that we

buy from protecting us. If we find a house who sell those people the only thing we can do is to buy of some one else, and make them understand that we will not buy from them while they continue to sell this class of trade. Being so close to this city we are bothered a good deal by department stores. They sell certain things at almost cost in our town. We have never found yet where they offered Nails or Barb Wire or anything of that kind, but they will pick up one article or another and make that a leader and charge it up to advertising. I don't see how we can accomplish anything unless we can make a demand upon those jobbers and manufacturers from whom we buy that we will not patronize them unless they protect us.

HOW DOES THE ASSOCIATION INCREASE ITS MEMBERSHIP?

The Secretary: I will state that the traveling men have been enlisted in this cause. We feel that the traveling men are our friends and we are their friends. The more goods they sell to us the better they are off, and they are interested in this just as much as we are in a sense. They travel around over the country and they call on a man a dozen times a year and sometimes oftener than that, and they can present this matter in a way that will induce these people to become members. That is one of the means. Then we send our circular letters to them asking them to attend. The result of traveling men's visits and solicitations has been that, if they do not secure their membership at the time, the dealers will often send in their applications afterward to the secretary.

Geo. R. Plowman of St. Louis: It has always seemed to me that the non-advancement of associations is due to the inherent selfishness of man to a great extent. We are always waiting for somebody else to do things for us that we should do for ourselves, and we oftentimes forget that when we benefit others we benefit ourselves. Now, as the secretary says, the solicitation of the commercial traveler is of course a great benefit to our organization, but I think if every one in his own district and his own city would appoint himself a committee of one to go around to these merchants who are not members of this organization and explain it to them that there would be very few who would not come into it.

Louis Hering of Blackburn: I don't see why this organization should be different from others. It is simply a case of geometrical progression. We have no occasion to take as a standard other organizations that started years ago or being downcast at the progress we have made. We have nearly doubled our membership from a year ago. Take the Missouri and Kansas Retail Implement Association—they worked along for five or six years. At times their increase was substantial, other years it was virtually nothing; but there has been a substantial growth. Take the lumber associations—it is the same way. If you don't make a start you will never make a finish.

After a discussion of qualifications for membership and the desirability of establishing some method of passing upon applications, the convention adjourned.

WEDNESDAY AFTERNOON.

The president stated that the next item on the regular order of business would be a report from the Executive Committee, but as that body was not ready to report he would ask the vice-president of the National Hardware Association, R. W. Shapleigh of St. Louis, to discuss the subject, "Relations Between Manufacturers, Jobbers and the Trade." The convention was advised that Mr. Shapleigh was ill and could not be present.

The president then asked J. F. Bannon of St. Louis to address the convention upon the subject of

Some Things to Be Avoided By the Association.

I think the first thing to be avoided should be, not to allow anything to enter into our association whereby its

peace or harmony might be disturbed or broken; as that is the foundation and success of every successful organization or institution. We can see only too plainly the results when not avoided.

Second, We should avoid misrepresenting the purpose of our organization and its aims.

Third, We should avoid egotism, allowing others to praise our works.

Fourth, We should avoid passing ridiculous resolutions.

Fifth, We should, as far as possible, avoid the mistakes of other organizations, which have proven detrimental to their usefulness.

Sixth, We should avoid giving offense to those whom we expect to assist our organization.

Seventh, We should be very careful to avoid any attempt to restrict any man's business on broad lines.

Eighth, We should avoid any attempt to injure any manufacturer or business by withdrawing patronage, or even threatening to do so, or in other words, do not boycott.

Ninth, We should avoid contact with those who would seek to disorganize, or destroy our usefulness, as an organization.

Tenth, We should endeavor to avoid anything that does not tend to cement the manufacturer, jobber and dealers' interests more closely than ever before.

Eleventh, We should avoid disposition on our part, no matter how promising it might appear, to dictate a policy for others to operate their business.

Twelfth, We should avoid trying to do too much, thereby making a dismal failure of our organization and its noble and glorious purpose, which we assembled less than one year ago to effect.

Thirteenth, Be careful to avoid adopting rules and arbitrary methods, for such methods in anything will eventually prove a failure.

Fourteenth, We should, as far as possible, avoid accumulation of unsalable and unkempt stock, thereby becoming our own and most dangerous enemy, by imagining it is some one else's methods that are destroying our usefulness and trade.

Fifteenth, We should be more than careful to avoid any and all worthless discussions on topics that neither we ourselves nor any one else could in any manner change.

Sixteenth and last, But not least of all, we should certainly use our best endeavors to avoid turning aside the strong grasp of fellowship and good will that has, and is, being extended to aid us on all sides. As a loving mother would assist her child to walk, so our friends are assisting and aiding us, for we are yet but an infant, helpless and dependent.

Gentlemen, I think a full discussion, if time will permit, on the best methods and means of accomplishing these purposes cannot help but send us back to our homes better and wiser men; bearing the good will, respect and esteem of those who have our interests at heart. The subject is so broad one does not know where to stop, and in conclusion would say, no doubt our experience will be no different from others, but with peace and harmony and an honest purpose to succeed we cannot help but accomplish our purpose. It may take us some time and a great deal of hard work, but as we grow older and stronger the results will be felt, and an organization that can be handed down to future generations to laud and praise. I will conclude, trusting that we may all meet at our next annual meeting with no links broken from the chain, but many new ones welded, with a purpose to make it a stronger and better one; and what might seem impossible will become a possibility, and what might seem at times a failure will become a success; and in the end, when we have laid down the busy cares and toll of life, future generations may praise our works, and we can point with pride to the well developed organization that to-day stands before the world an infant.

Mr. Haus: Gentlemen, I think that all of the points which have been brought out are good, and that this paper should become the property of the organization. Get it printed and call these points the sixteen commandments for the Missouri Retail Stove and Hardware Dealers' Association, and I would like to add one more, "Thou shalt love thy brother as thyself."

Mr. Best of Palmyra: I move that Mr. Bannon's paper be spread upon the minutes with the seventeenth amendment without further comment and without further division. The motion was carried.

Secretary Thomas suggested as an eighteenth amendment that all dealers be recommended to take some trade paper and read it.

Question Box.

DOES IT PAY TO HANDLE SECONDS?

Geo. R. Plowman of St. Louis: It seems to me poor policy for a dealer to handle seconds. In the first place in handling inferior goods he would want to make more profit than on the better grade; therefore, in handling the seconds the dealer does not always say that they are seconds, and then when the article does not last the fact comes back at him with force and he loses custom.

G. M. Gruendler, St. Louis: I find that when people are educated to buying seconds they frequently call at your store for them; it is better policy to sell them the best every time, getting a proper price, even when they think they are getting seconds; and then, when the articles last longer, they will return for the same quality of goods.

DO YOUR CUSTOMERS TELL YOU THAT YOUR COMPETITOR OFFERS PRICES BELOW COST ON GOODS HE HAS NOT IN STOCK, AND HOW DO YOU MEET THIS COMPETITION?

J. G. Webber of Clayton: I should not like to have you feel that I take up too much of the time, and I do not like to feel that I am the only one who is getting "done up brown;" the matter I speak of is one of protection; I had an incident not long ago where the buyer got figures from several houses, among them being a grocery store; he was a good customer of mine, but he said he could get 40 per cent. off at the grocery store—of course, I could not meet this.

National Association.

The secretary stated that the Executive Committee had under consideration at the present time the advisability of sending a delegate or delegates from this association to attend the national conference, to be held in Chicago on March 12, and that it would be well for the convention to take the matter up informally during this session to ascertain the feeling in regard to it. A number of the members expressed themselves heartily in favor of sending at least one delegate to attend the conference.

Short Addresses.

A number of manufacturers were here called upon for remarks and responded in a manner which indicated their sympathy with the objects of the association and their desire to co-operate with it.

Report of Executive Committee.

The Executive Committee made the following report: The Executive Committee would recommend that the association empower a committee to select a button to be emblematic of the association, to be worn by its members; also that the association select three delegates to the national conference to be held in Chicago, March 12, for the purpose of effecting a national organization; also, the committee have entered into a contract with H. L. Palmer to publish a hand book of our association, and we recommend that the president and secretary be empowered to sign such a contract; also, the committee under the powers given by the constitution have selected as secretary and treasurer for the ensuing year E.

Thomas of Trenton, Mo.; also, the committee have adopted the following as the form of application for membership to the association:

To the Officers and Members of the Missouri Retail Stove and Hardware Dealers' Association: I respectfully represent that I am engaged in either the occupation of retail dealer in Stoves or Hardware, or as salesman of such; that I am in full accord with the objects of your association, and most respectfully ask that I may be enrolled as a member. Recommended by _____ retail dealer.

On motion the report of the Executive Committee was adopted.

Delegates to Chicago Conference.

As delegates to attend the meeting in Chicago for the purpose of effecting a national organization J. W. Poland of Carrollton, F. A. Kansteiner of St. Louis, and Taylor Frier of Louisiana were nominated and elected.

Grievance Committee.

The following Grievance Committee were appointed: John F. Bannon of St. Louis, L. D. Groom of Richland, and J. H. Best of Palmyra.

The selection of a place of meeting next year came up for consideration, but action was deferred until Thursday. The convention then adjourned.

THE BANQUET.

Under the management of the St. Louis Retail Stove and Hardware Dealers' Association the members and their friends enjoyed a fine banquet on Thursday evening



at the St. Nicholas Hotel. All the arrangements for this occasion were of a most pleasing character. The tables were arranged in the form of a three pronged fork, and were beautifully ornamented with cut flowers and ferns and trailing arbutus. A fine orchestra supplied instrumental music and the Olympia Quartette rendered choice vocal selections from time to time. Over 150 persons participated in the banquet, including quite a number of ladies, many of the Hardware dealers having their wives with them. Covers had been laid for more persons, but some of the members were unable to spare more than two days from their business and had returned home.

The menu was more than ordinarily pleasing, and after the coffee had been served, President F. D. Kansteiner of the St. Louis local association called for order and introduced H. F. Brinkmeyer, also of St. Louis, who acted as toastmaster. He performed his duties very gracefully, calling upon President Harney of the State association, H. O. Kent of the Kent & Purdy Paint Company, ex-President J. W. Poland, Frank Wyman of the Simmons Hardware Company, F. P. House of the Charter Oak Stove & Range Company, J. M. Black of the A. F. Shapleigh Hardware Company, A. G. Brauer of St. Louis, Chas. H. Thuner of St. Louis and others.

THURSDAY MORNING.

The president called the convention to order at ten o'clock. W. F. Halyard of Joplin read the following paper:

How I Advertise.

Receiving a programme of this meeting was the first knowledge I had that I was to prepare a paper, and that the subject was to be "How I Advertise." Your committee did not consult me in this matter, but took snap judgment, and then were not liberal enough to make it simply advertising but have limited me to how I advertise. This will not be a paper.

We have been, for the last two years, watching the remarkable development of our mining industry and of our city. This is being carried on by wideawake men from all parts of the United States, and has caused an increase in Joplin's population of more than houses could be provided for; many have to live in tents. The popularity of our salesmen and the influence of our friends and customers has brought us all the business we could attend to. We have gradually discontinued our newspaper advertisements and drawn in our solicitors, and devoted all our energy to supplying and pleasing these people who have favored us with their business.

WE FOUND A SATISFIED CUSTOMER

to be a most active advertisement, and we endeavored to please them by being attentive to their wants, by treating all alike and making our prices the same to one as to another.

We charged a reasonable margin of profit, which was appreciated by the newcomers, and they could compare prices with what they received at home without feeling that we were taking advantage of them.

The results have been surprising; customers speak kindly of us and often inconvenience themselves to persuade their friends and acquaintances to visit our store.

This is not offered as a lesson in advertising, but as a duty to the association, to do the best possible with the subject given me. Extraordinary conditions only have rendered it possible to do business this way, and it soon will be necessary for us to again take up serious advertising as it is generally understood by merchants.

Mr. Groom: It is possible, with the exception of two or three members of this association, we are not so favored as Mr. Halyard with the business actually coming to us, and we have had to keep up the old routine and study, if possible, new methods of advertising in order to bring us business. While the competition in his part of the State is very strong, the customers are increasing daily. There are many of us who do not depend on transient trade, I guess most of the members who live in the northern part of the State and in the city of St. Louis depend on regular trade.

The only way to reach that trade is by keeping your name and business constantly before the people, and, in any advertising whatever try and not deceive the people in thinking that you have something they want when it is not exactly what they want; nor keep them in ignorance of the merits of the article when you knew it was not what they wanted. I have always been conscientious in my business. If a man leaves it to my judgment, I do the best I can for him. I find this is the only way to hold customers, always treat them fairly and honestly. When you have once obtained a customer that way, there is hardly anything that can break him off. I do not think that any honorable business man would intentionally practice anything but what was straight and right with his trade; if he did, he would not only lose that customer, but the neighbors of that customer, because they all have friends. I find that newspaper advertising pays to some extent, especially in the Implement trade and in the Wagon trade. I spoke the other day about my Wagon trade, how it increased every year. I think the advertising in the county papers increased my Wagon trade, because I keep that trade constantly before the people.

I have always been a liberal patron of newspapers and county papers. I advertise in three county papers.

I find it pays to send out advertising letters addressed personally to my friends. I find that class of advertising very successful.

Mr. Biggers: Advertising is not especially in my line. In regard to the retail dealers, there is no question but what every dealer should advertise. You cannot expect to get the trade from your surrounding neighbors, whether it is in the city or in the country, without they know what you have to offer. If you have any good thing, tell them about it, whether Wagons or Vehicles; let them know that you have them. I know of one of our customers in Arkansas, who claims to have all the trade, who is one of the greatest advertisers I ever saw. He has a circular of one kind or another going out all the time. He puts in the good things and the new things, and he prints some prices—not always, though, the prices—but he talks up his goods and lets his customers know what he has. I think he sends these in a personal way. It is a wideawake way of handling his business.

Co-operative Insurance.

J. M. Kenyon of Maitland read the following paper on "Co-operative Insurance."

I was very much surprised on receiving a copy of the programme of the Retail Hardware Dealers' Association to see my name on the programme for a paper on "Co-operative Insurance." Never having given the subject any thought and knowing nothing about the details of such an organization, my first thought was to write to your secretary that it would not be possible for me to prepare a paper on the subject.

But being a member of the Reciprocal Underwriters, who are a company organized by the Wholesale and Retail Implement Dealers' Association of Missouri and Kansas, with headquarters at Kansas City, Mo., with J. W. Garvey, manager, I wrote to Mr. Garvey and requested him to prepare a paper to be read at this convention, and so informed your secretary of what I had done. Up to this time I have not heard from Mr. Garvey, and it may be my request to him miscarried.

And now, after having waited for a paper from Mr. Garvey until the day before the convention, I have prepared this paper as best I can, and trust the subject will be fully discussed by those more competent to discuss it than I am, and that some time in the not far distant future the Retail Hardware Dealers' Association of Missouri may be able to organize an association of their members for fire protection similar to the Reciprocal Underwriters or the Lumbermen's Exchange of Kansas City, Mo.

ECONOMY OF PLAN.

By co-operative insurance I understand is meant an association of men organized into a company for the protection of each other against loss by fire, by which the members secure their insurance at actual cost, which is usually not more than half as much as it costs in the old line companies. I am in favor of the organization of such a company by the retail Hardware dealers of Missouri, and believe they can save 50 per cent. of the cost of their insurance on such part as can be carried by this company. Of course the amount that can be carried by the association will depend on the number of members.

The expense of doing business by the old line companies is estimated to be about 41 per cent. of the premiums, so that for every dollar that is received by them only 59 cents goes into the hands of the company and is available to pay losses; and the rate of insurance is established so as to pay a good profit to the company over and above the expenses.

In the promiscuous insurance, such as taken by the old line companies, there is a moral hazard that adds quite a good deal to the risk. That, in an association of Hardware dealers, would not exist.

The expenses of an association of dealers for the

protection of each other against loss by fire would be less than 20 per cent. of the premiums. So that over 80 per cent. of premiums paid in would be available to pay losses. As a rule we could only place a part of our insurance with this association, but in case of loss settlement would be made promptly and upon broad commercial views, such as prevail among its members, rather than upon legal technicalities such as generally prevail among public companies; and this settlement would form a basis for the settlement of the other companies, which would be quite an advantage to us in case of a loss.

THE RECIPROCAL UNDERWRITERS.

An organization of this kind would be an advantage to us in securing better rates from the old companies. The Wholesale and Retail Implement Dealers' Association of Missouri and Kansas has an association among its members called the Reciprocal Underwriters, which was organized in 1897, in which I carry a policy of insurance for \$2000, all that I can carry in this company. The cost of the insurance from the time they commenced business, including all expenses, to January 9, 1900, about two and one-half years, was 45 per cent. of the premiums paid in, a saving to members of 55 per cent. over the rate charged by the other insurance companies. Besides, most of the members of the Reciprocal Underwriters have been able in consequence of this organization to secure a better rate of insurance from the old companies than they could before the organization of the Reciprocal Underwriters. So that the saving to the members has been considerably more than the 55 per cent. of the premiums paid.

THEIR PLAN.

Each member of the Wholesale and Retail Implement Association who wishes to become a member of the Reciprocal Underwriters must deposit with the manager a sum equal to 1 per cent. of the amount of his insurance. He pays besides this the premium in cash at the rate of insurance established by the old companies. At the end of the year that part of his premium that is left after paying his part of loss and expenses is placed to his credit and added to his deposit until the sum added is double the amount of his deposit. This amount is kept as a reserve fund, and the balance of the premiums not required to pay losses and expenses is returned at the end of each year to the members.

All moneys received by the manager are deposited with the trustee and by him placed at interest.

THE LUMBERMAN'S EXCHANGE

is an association organized by the lumbermen of Missouri and Kansas for the protection of its members against loss by fire and also managed by J. W. Garvey, Kansas City, Mo. The statement of its manager for the five years since its organization shows that the average cost of insurance to the members for the five years has been 32½ per cent. of the premiums paid in, which were based on the rate of insurance established by the old line companies.

With the example of these two companies before us showing the great saving to the members in their insurance expenses, it seems to me that it would be to the interest of the retail Hardware dealers' association of Missouri, as soon as it becomes strong enough, to organize an association for the protection of such of its members as wish to become members or subscribers to the association. I would be pleased to take out a part of my insurance with such an organization.

When we insure in the old line companies the money we pay for insurance goes out of our State to the East, but in an organization among ourselves the money paid would be kept at home or within our own State.

I have in my feeble way attempted to write on this subject. I have no doubt we have many members present who can talk much more intelligently than I have

written, and I hope they will now express their views upon the subject.

Mr. Webber of Clayton: I don't think I can add anything to the paper that has been read. I can only say this from experience, that I belong to an insurance company which is called the Farmers' Mutual of St. Louis County. It was established some 26 years ago. I have been a member of it ever since and I have never paid an assessment. We have had losses, but they have been paid right along. In the last six months we have had the heaviest losses we have ever had; they amounted to some \$3000 or \$4000. They have \$12,000 to \$15,000 on hand and they have had remarkably good success. They are conservative. They do not take very large risks; they insure two-thirds of the actual value, but do not take risks larger than \$2500. They are generally conceded by everybody, and even by other insurance companies, to be very solid. Nobody has ever waited possibly more than 30 days for his money. As to how this would compare in comparison to the insurance in the cities of course I am not able to say, but certainly for an insurance out in the country it is first-class.

Mr. Groom: The subject of insurance is a question, of course, that comes to all of us alike. A few days ago I got some insurance; I had a policy that had expired and I went down to an insurance agent in our town and asked him about the rates on insurance, if there had been any change, and he turned to his rate book. They have always considered the lumber people a hazardous risk, and I was surprised to see upon that rate book that the rate to lumber men in our town had been reduced over one-half. Upon inquiry I learned that the lumbermen were members of the Lumbermen's Association, and this brought the old line companies down so that they were willing to take the risks at reasonable prices. Now, from what I know of Hardwaremen, I know them to be good, honest men; that insurance companies need not fear any risk from that score, because of being, as you might say, "hawked or deceived," but we are placed many times in blocks together alongside of grocery stores worth \$250 and insured for \$500, and we are affected by this class of improvements.

I believe if we organize among ourselves as soon as we become strong enough upon this mutual plan we can bring these underwriters down until we have them at our feet. That is one of the good things we can do by this mutual insurance.

Mr. Wright: I believe with my brother on the feasibility of this plan of mutual insurance. I think it would be a good idea for this convention to appoint a committee of three to take into consideration this object and report at the next meeting of this convention. These insurance companies will see that we mean business and are going to organize something for our own protection in the way of fire losses. I make a motion to that effect.

The motion was seconded and carried. The president deferred the appointment of committee until later.

Association Button.

Mr. Frier reported that the Executive Committee had selected a button and the secretary was authorized to purchase 100 buttons of design shown.

Insurance Committee.

The president appointed on the Insurance Committee Louis Hering of Blackburn, F. S. Bolte of St. Louis and J. M. Kenyon of Maitland.

Alternates at Chicago.

On motion he also appointed A. H. Gruendler of St. Louis as alternate for Mr. Kansteiner, E. Thomas of Trenton alternate for Mr. Poland and Louis Herring of Blackburn as alternate for Mr. Frier on committee to attend Chicago conference for the formation of a national association.

Kansas City

was selected as the city for the next annual convention.

Resolutions.

The following resolutions were adopted:

Recognizing the fact that the best of life is made up of pleasant memories and hopes for a better future, therefore be it resolved that a vote of thanks be tendered to the retail Hardware and Stove dealers of the city of St. Louis for the royal manner in which they have entertained us, with the assistance of the jobbers and manufacturers of the city; to the management of the Lindell Hotel for the use of this room; also to the trade press for the manner in which they have assisted our association and in publishing the reports of our meetings.

Do We Advance Most Rapidly by Individual Effort or by Convening to Legislate?

At the Thursday afternoon session George R. Plowman of St. Louis read the following paper on this subject:

I am somewhat of a kicker and perhaps a crank at times, or may have wheels, but if I am the same kind of a crank as Ben Franklin, the discoverer of the evolution of the world, or the inventor of the printing press, I don't know it, but if so, I am glad of it; if not one of that kind of cranks I am irresponsible and can be excused. I don't believe in harmony and unity. As a general thing, it is stagnation. For the sake of harmony, often means too much trouble, let it go. Progressiveness is real battle to the survival of the fittest and honor to the victor, but only justifiable when conducted in a humane and unselfish manner. Do we advance most rapidly by individual effort, or by convening to legislate?

Mr. President and gentlemen, it is with great diffidence that I offer to endeavor to explain why I think that individually we advance more rapidly than collectively, knowing that I am unequal to the task; but I have a few moments this morning and thought, if time justified, and there was an opportunity offered, it would perhaps give the gentlemen present some food for thought after the Convention had finished its business, or rather spent the time allotted.

As I look back 20 years to gatherings and conventions for different purposes and read of proceedings among the highest legislatures in the world, it seems to me that we have practically stood still or the progress has been so small that to an ordinary conception it is not apparent. It seems to me that almost the same words and expressions and even the same manner of delivery is used as at my first acquaintance. He does not seem to grow any younger or older, but just quit growing—but as nothing stands still, there must be either a progression or a retrograde movement. I am satisfied he does grow, but so slowly that we shall all have crossed that bourne whence no traveler returns before he begins to walk, and hope, the mother of progress, grows discouraged; resolution slackens his grasp and advancement is at a loss.

But individually we have made wonderful strides. The business man and mechanic and laboring man does not give his last efforts and thoughts.

By which I mean his best thoughts and efforts. When the convention as a whole is finished, he leaves it to some one else. If he did no better individually than he does collectively, he would surely be a failure in whatever he undertook in the struggle for existence. I will close my remarks with a request to the gentlemen present to consider them (not that I offer them as Gospel) but as the time and effort expended, secured the results equal to the trouble and think what would have been accomplished with as much effort, time and labor in a material way, and if you are not fully satisfied, think of some way we can accomplish more. Of course, socially I need not discuss, as I do not believe there is a measure sufficiently large to hold the benefits derived,

but that is not primarily the cause of this convention. I thank you for your attention and if I have started a thought or created a resolve, I am amply repaid for my address.

Other Resolutions.

Resolved, That the secretary notify the Kansas City Hardware dealers of our action in convention to-day, and urge upon them the forming of a local Hardware association, so that by the time our next convention is held they will be of material assistance to our association.

Be it Resolved, That we empower all traveling men who are members of and in good standing in this association to solicit membership for this association and to receive 50 cents for each member proposed, providing the membership fee accompanies the application.

Resolved, That the Executive Committee be empowered to appoint such committees as may hereafter become necessary during the interim between this and our next meeting.

Resolved, That the thanks of this convention be extended to J. Harry Dickbrader and Mr. Hyatt for their faithful services as assistant secretaries during this convention.

The resolutions were unanimously adopted.

Mr. Plowman offered a resolution that thanks be tendered the country members for their assistance and their attendance, which was unanimously adopted.

The convention then adjourned.

CONVENTION NOTES.

E. C. Atkins & Co., Saw manufacturers, were represented by Julian W. Perkins, assistant secretary, and G. W. Gladding, the company's Missouri salesman, who distributed souvenir thermometers.

Exhibits by manufacturers were not a feature of this convention as they have been of some association gatherings this year. The manufacturers' and jobbers' representatives were, nevertheless, quite numerous, as shown by the following list of those who were observed in the corridors of the Lindell Hotel:

J. G. Beegle, the Electric Cutlery Company, Newark, N. J.

C. H. Bishop and J. P. Dutton, C. Sidney Shepard & Co., St. Louis.

E. B. Drew, E. E. Souther Iron Company, St. Louis.

J. T. Riley and William Enders, Simmons Hardware Company, St. Louis.

J. C. Etz, Witte Hardware Company, St. Louis.

Ed. J. Fox, Tiemann Stove & Hardware Company, St. Louis.

S. E. Grote, S. E. Grote Paint Store Company, St. Louis.

W. C. Hendricks, Rumsey & Sikemeler Company, St. Louis.

H. C. Thompson, G. B. Van Cleave, F. A. Spielman and Geo. W. Jeffords, Buck's Stove & Range Company, St. Louis.

Peter McGivney, Synder & Baker Stove Company, Belleville, Ill., and Standard Stamping Company, St. Louis.

John Goetz, Harry Hoener and Edw. O'Dea, Bridge & Beach Mfg. Company, St. Louis.

R. J. Rankin, Duffy-Trowbridge Stove & Mfg. Company, Hannibal, Mo.

Geo. W. Trout and H. J. Ruhling, Geo. W. Trout & Co., Chicago.

B. F. Wilkerson and H. H. Spielman, A. F. Shapleigh Hardware Company, St. Louis.

Alan W. Wood, Chas. L. Gilpin and F. C. Shays, W. D. Wood & Co., Pittsburgh, Pa.

W. A. Lockwood, Ringen Stove Company, St. Louis.

Alexander Witte, secretary Witte Hardware Company, St. Louis.

W. L. Vickers, Majestic Mfg. Company, St. Louis.

R. B. Whittemore, Jr., president American Corrugating Company, St. Louis.

Wm. McCalpin, secretary Bridge & Beach Mfg. Company, St. Louis.

L. I. McGeary and Frank Selinger, Twin Burner Vapor Stove Company, St. Louis.

The trade press was represented by John W. Bowman of the *Stoves and Hardware Reporter*, Daniel Stern and S. P. Johnston of the *American Artisan*, and Geo. W. Cope and C. F. Wieland of *The Iron Age* and *The Metal Worker*.

The Committee of Arrangements for the banquet con-

sisted of F. A. Kansteiner, G. A. Pauly, H. F. Brinkmeyer, F. S. Bolte, A. F. Geschwinder, A. H. Gruendler, August Steinmyer and H. G. Koenig. The committee proved to have been well selected, according to the verdict of all present.

American Steel & Wire Company's Catalogues.

THE AMERICAN STEEL & WIRE COMPANY, Chicago, New York, San Francisco. This company have just issued several extremely dainty catalogues, each being either devoted to a special line or issued for a special purpose. One relates to Juniata Horse and Mule Shoes, which are manufactured by the company at their Shoenberger mill, Pittsburgh. This catalogue gives illustrations of the leading styles of these Shoes, with tables showing the average number of Shoes of different sizes and the number of Shoes packed in a keg. It also contains tables of weights of round, square and flat Iron per lineal foot. The company's trade mark, which has just been adopted, is conspicuously printed in this catalogue, and consists of a globe resting on a shield, the name of the company being partly across the top of the shield and diagonally across the globe. Another catalogue, of which 300,000 copies have just been printed, relates to the company's American Woven Wire Fencing, and is intended for distribution to merchants. The third relates to the company's Ellwood Woven Wire Fencing, and 300,000 copies of it have also just been printed, likewise for distribution to merchants. These two catalogues are profusely illustrated and contain all the necessary information relative to the various styles of fencing offered. The fourth and fifth catalogues, which are intended for much wider circulation, 1,000,000 copies of each having just been printed, are also devoted to American and Ellwood Fencing, and are intended to direct the attention of consumers to the merits and advantages of these styles of Fencing.

Among the Hardware Trade.

Jno. J. Cloos, who has heretofore traveled in Nebraska for the Simmons Hardware Company, has lately entered the retail business in Fremont, handling Shelf Hardware, Stoves and Tinware, Sporting Goods, &c.

Jno. S. Yost has succeeded Warn Hardware Company, Fort Scott, Kan. Mr. Yost is adding to the stock thus acquired.

J. V. Russell of Merrill, Mich., has purchased the Hardware and Stove business of H. P. Everett, Stockbridge.

The Hardware store of Rufus G. Burleigh & Co., Franklin, N. H., was badly damaged in a recent fire. The loss was \$15,000, with insurance of \$7000. The business is being continued at the old stand under a temporary roof.

Chas. A. Ward has opened up a stock of Shelf Hardware and Tinware at South Norridgewock, Maine.

Ralph Russell, Corning, Iowa, finding his former quarters inadequate, has removed across the street to much larger and more commodious premises.

Charles Collins has purchased C. H. Hamilton's interest in the firm of Bennett & Hamilton, Ripley, N. Y., and the firm style is now Bennett & Collins.

Beaverton Hardware Company, Fred. Powell, manager, Beaverton, Mich., will soon remove to new quarters.

Dudfield Brothers have disposed of their Hardware business in Lathrop, Mo., to Dudfield & Klepper.

E. M. Price & Co. have purchased the Hardware store at Brookhaven, Miss., formerly conducted by L. D. Boardwee.

Rehkopf & Siemon have succeeded Fred. Rehkopf at Douds Station, Iowa. They are occupying a new building, 22 x 50 feet in dimensions. Their stock comprises general Hardware, Stoves and Tinware.

C. F. Dinkel has succeeded C. C. Feil & Co. in the Farm Implement, Carriage and Buggy business, at Charles City, Iowa.

Howard Hardware Company are successors to L. G. & C. E. Howard, Bellows Falls, Vt.

The store of J. A. Morton was destroyed in the recent conflagration at Hadley, Mich. Mr. Morton will rebuild in the spring. At the present time he is continuing the business in temporary quarters.

Sanborn & Robinson, Lawrence, Mass., have purchased a third interest in the W. R. Pedrick Block, and will occupy a part of the block, 25 x 93 feet, five stories, with their business.

Orrin Skutt and John Gray have purchased the Hardware stock of Hall & Quereau, North Rose, N. Y., and are continuing at the old stand under the style of Skutt & Gray.

Wethey & Crane, Fort Byron, N. Y., have recently purchased a brick block, two stories and basement, 60 x 27 feet, and have installed a plate glass front and new fixtures. They have also just completed an addition, 20 x 40 feet, two stories.

Horace Davidson has lately purchased the Hardware stock of C. B. Williams, Marvin, S. D.

C. T. Byington and E. S. Gray have formed a partnership and entered the Hardware, Stove, Farm Implement and Plumbing business at Healdsburg, Cal. The style is Gray & Byington. Mr. Gray has had about 16 years' experience as a plumber, and Mr. Byington was formerly in the grocery business.

Charles L. Trice has sold out his stock of Hardware in Lott, Texas, to W. M. Gunnell & Co.

Reed & Banker have succeeded Queen & Reed in the Hardware, Agricultural Implement and Furniture business at Trure, Iowa.

J. & H. G. Schwab have purchased M. G. Kerstner's Hardware, Stove, Farm Implement and Sporting Goods business at Gordonville, Mo.

S. J. Dice has purchased the Hardware and Farm Implement business of Ambrose Brothers, Stanberry, Mo.

The Hardware store of H. E. Smith, Diamond, Ohio, was recently destroyed by fire. The loss was about half covered by the insurance.

Butts, Matthews & Danford have succeeded Frank F. Gaylord, Sodus, N. Y.

Brittson Brothers have bought the Hardware business of Ashbacher & Bell, Decatur, Ind. The store will be remodeled by the new proprietors.

The Penick, Coldert, Hughes Company have incorporated under the laws of the State of Texas to do a Hardware business, retail, in the towns of Anson and Albany, Texas, and retail and wholesale at Stamford, Texas. They will also do a banking business in connection with their house at Stamford. The capital stock of the company is \$25,000.

On account of ill health of one of the partners, Peterson & Koss have discontinued and sold out their Hardware business at Appleton, Wis.

J. D. Eger & Co., Lexington, Neb., have sold their business to Rosenberg & Wallace, who will continue at the old stand.

E. S. Hart & Co. have succeeded Hart & Klingler in the Hardware, Stove and Plumbing business at St. Clair, Mich.

The store of W. Downey & Son, Massena, Iowa, was recently destroyed by fire. They are at work on a new brick building, which will be 50 x 60 feet, two stories.

Severance & McRae have dissolved partnership in the wholesale and retail Hardware business at Hope, Ark., and K. C. McRae is now conducting the store under his own name.

Aldrich Brothers, Elkton, Mich., will combine the two stocks owned by A. J. Aldrich and D. E. Winer.

McAlister & Maddox have succeeded McAlister & Kirkpatrick, Oakland, Ill.

S. S. Miller has succeeded D. S. Hendrix in the sale of Shelf Hardware, Stoves and Tinware, Agricultural Implements, Harness, Buggies, &c., at La Place, Ill.

M. A. Wipperman succeeds the old firm of Wipperman & Shipe, Hankinson, N. D.

G. H. Schweining has removed his Hardware and Stove stock from Davis to Sulphur, I. T.

Fred. W. Monroe has succeeded Monroe Bros. in the retail Hardware, Stove, Farm Implement and Sporting Goods business at Tyner, Ind.

Sykes & Bell, Roscoe, Ohio, have dissolved. James A. Bell has purchased his former partner's interest, and will continue under his own name at the old stand.

Requests for Catalogues, &c.

MEADER & SANDERSON have purchased the Hardware business of W. J. Farnam, Oneida, N. Y., and will continue at the old stand. They express a desire to receive catalogues, &c., from manufacturers and jobbers of Builders' Hardware and Blacksmiths' Supplies.

F. L. Smith, formerly of Smith, Van Horne & Co., Oswego, N. Y., will re-enter the Hardware business at that point, opening up about April 1. Mr. Smith will carry a full line of Builders' Hardware, Mechanics' Tools and Fishing Tackle, and requests catalogues and discount sheets relating to these lines.

Raffauf & Bael, Rome, N. Y., advise us that they would appreciate copies of catalogues and discount sheets from manufacturers of Builders' Hardware and Carriage Makers' and Blacksmiths' Supplies.

Carruthersville Hardware Company, Carruthersville, Mo., have been organized with a paid up capital of \$5000. Otto Seyppel, whose stock of Hardware, Stoves, Agricultural Implements, Sporting Goods, &c., has been purchased by the company, is president; W. F. Tarkington, vice-president, and Charles Dorroh, secretary and treasurer. The new company would be pleased to receive catalogues and other printed matter pertaining to their lines.

Trade Items.

GEORGE M. SHIRK has just been appointed general sales agent for the Grand Rapids Refrigerator Company, the Northern Refrigerator Company, and the Leonard Mfg. Company of Grand Rapids, Mich., in Chicago, and will have a salesroom at 150 Michigan avenue, where he will carry a full line of samples of Refrigerators made by these companies.

SIMMONS HARDWARE COMPANY, St. Louis, Mo., are sending out a half tone picture, effectively framed, of their general offices. It gives an excellent idea of the extent of their office force, and the manner in which their business is conducted.

At a recent meeting of the stockholders of the Boston & Lockport Block Company, Lockport, N. Y., the following named gentlemen were elected directors for the ensuing year: Hon. Albert D. Bosson, Boston, Mass.; Frank Gebbie, St. Johnsville, N. Y.; Mrs. Adelaide C. Beverly, Lockport, N. Y.; Myron H. Tarbox, Boston, Mass. At a subsequent meeting of the directors the following officers were elected: President, Hon. Albert D. Bosson; vice-president, Frank Gebbie; secretary and treasurer, Myron H. Tarbox; assistant secretary, Alfred B. Tarbox.

At the election of officers of the American Steel & Wire Company by the Board of Directors Alfred Clifford

was chosen treasurer to succeed William A. Green, resigned. P. W. Moen was made third instead of fourth vice-president, the position he held last year. S. S. Chisholm was elected fourth vice-president instead of third, as last year.

CONSOLIDATED RAILWAY ELECTRIC LIGHTING & EQUIPMENT COMPANY, Derby, Conn., with New York office at 100 Broadway, announce to the trade under date February 23 that they have purchased the entire assets (plant, tools, dies, merchandise, trade-marks and good will) of the Wilcox & Howe Company of Derby and will continue the manufacture of Carriage Hardware and Special Forgings. Railway Equipment and Automobile Forgings will also be a feature of their business. In acquiring the Wilcox & Howe property it is their purpose as a new corporation to improve the manufacturing facilities, to introduce new lines and by careful attention to the requirements of the market to merit a liberal patronage. The purchase included a considerable stock on hand, and the factory is now in operation. F. W. Benham, who was connected with the old company, will continue with the new in charge of their forging department. A new sheet of prices will be issued in a few days, and in the meantime all orders will be executed on the basis of the last published prices of the Wilcox & Howe Company.

THE EMPIRE KNIFE COMPANY of Winsted, Conn., have just appointed Dame, Stoddard & Co., Boston, Mass., their exclusive agents on Empire Knives for New England. Dame, Stoddard & Co. are putting in a complete line of these Knives and through their salesmen will look closely after the New England field. All inquiries and orders for Empire Knives coming hereafter from New England territory will be taken care of by this well-known Boston house.

ON one side of a colored leaf in this issue the Edson Mfg. Company, 134 Commercial street, Boston, Mass., illustrate the Edson Odorless Sewage Disposal Outfit, which, they state, is being used in Cuba, to which they have recently made additional shipments. Their new catalogue recently issued illustrates and describes Edson's line of Patent Trench, Force, Manhole and Pile Sinking Pumps and the Edson Prospecting and Mining Outfit.

UNDER the management of A. M. Stevens the Illinois Watch Case Company, Elgin, Ill., have opened an office in the Gill Building, 9, 11 and 13 Maiden lane, New York, where they will carry a complete stock and thus insure prompt service for all their Eastern patrons.

H. A. HEPPNER & Co., manufacturers' sales agents, of Portland, Ore., have purchased the business of I. H. Amos & Co. of that city.

THE MILLER LOCK COMPANY, Philadelphia, have appointed R. B. McKim of 118 Pearl street, Boston, their Eastern agent, covering New England, New Brunswick and Nova Scotia. The Missouri Valley trade from Kansas City northward, and Texas also, will be covered this year by John T. Rowntree of Denver and Kansas City, who also represents these goods to the Coast and Rocky Mountain trade. The Southern trade will be visited by C. E. Chalfant, who also covers the Central and Canadian States not named above.

CARL BUCK, secretary of Packard Hardware Company, Greenville, Pa., died at his home February 22, aged 47 years. Mr. Buck was a son of Edwin Buck, was born and raised in Westfield, N. Y., and had been a resident of Greenville for 27 years. For three years he was an employee of Packard & Co., then becoming a member of the firm for 15 years, or until 1892, when he was made a director and secretary of the corporation of Packard Hardware Company, who continued the business of Packard & Co. He was one of the most prominent business men in Western Pennsylvania and was well and favorably known to many in business, social and political life.

Rapid Mortise Lock.

Russell & Erwin Mfg. Company, New Britain, Conn., and 43-47 Chambers street, New York, have just brought out the Rapid Mortise round end wrought steel lock, here illustrated half size. The main feature is the ease and rapidity with which the mortise can be made, the work being done with a $\frac{3}{8}$ -inch auger bit, requiring but little chiseling on the sides and none at all at the ends. To determine quickly and accurately the boring points, after finding the center of the edge of the door, the notched strike is tapped with a hammer. The holes at the ends should be bored but 1 16 inch deep, the remaining borings being $3\frac{1}{4}$ inches to admit the lock casing, then with a

slight trimming of the Vs formed by the bit, the mortise is ready for the lock. The same process is mainly followed in fitting the strike, except that the six borings are uniformly 1-16 inch deep. There are several other advantages connected with the lock which make it exceedingly easy to fit. The strike is so proportioned that without the use of a rule the keyhole and knob centers are

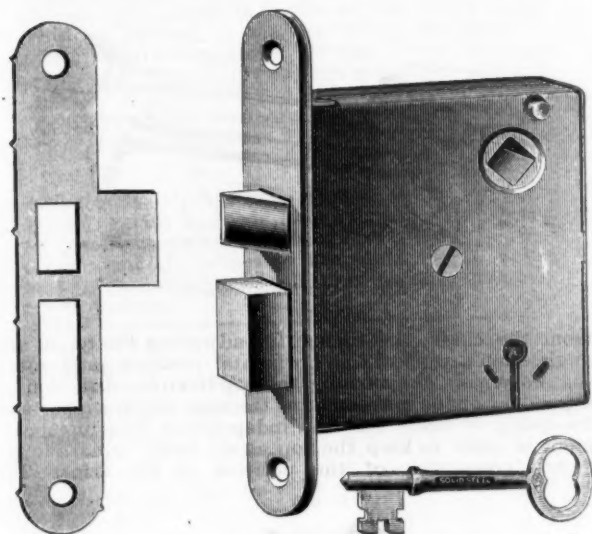


Fig. 1.—Notched Strike.

Fig. 2.—Rapid Mortise Lock.

quickly ascertained, a $\frac{3}{8}$ -inch bit being used, full directions in diagrammatic cut in circular form accompanying each lock. The notches of the strike are scarcely perceptible when the strike is in place. These locks are made in all finishes, with both bronze metal and steel fronts, according to the quality.

House and Force Pumps.

Athol Pump Company, Athol, Mass., have just completed a new house pump for cisterns or wells; also a new force pump, as here shown. The house pump, Fig. 1, is fastened to the base plate with two brass screws, through a loose collar, allowing the spout of the pump to set at any angle with the base, also the handle at any angle with the spout. They are made of brass where water comes in contact and nickel plated, and fitted for $\frac{1}{4}$ -inch iron pipe and for $\frac{1}{4}$ -inch lead pipe. The piston has extra



Fig. 1.—House Pump.

Fig. 2.—Force Pump.

wide bearings. The new force pump, Fig. 2, has a hose nipple at the top of the air chamber for connecting hose for any purpose that may be wanted. A cap at the top of the air chamber is screwed on when forcing water up through the check valve to a tank, or this cap may be loosened to give vent to the air chamber, while pumping into the sink. The pump can be changed from right to left hand by changing the rod head over and loosening the two brass screws on the collar and taking out the pins in the standard. This will allow the pump to be turned half way round. The pump is made of brass and nickel plated.

New Crescent Sprinklers.

The Crescent Brass & Iron Company, Detroit, Mich., have added to their line of lawn sprinklers those illustrated herewith. The combined nozzle and sprinkler,



Fig. 1.—Crescent Combination Nozzle and Sprinkler.

Fig. 1, serves a threefold purpose—a nozzle, ordinary sprinkler or an arc sprinkler. The Cracker-Jack, Fig. 2,



Fig. 2.—Crescent Cracker-Jack Sprinkler.

diameter of 36 to 48 feet, according to the water pressure. The sprinklers shown in Figs. 1 and 2 are made of brass, nickel plated. Fig. 3 illustrates a novelty in lawn

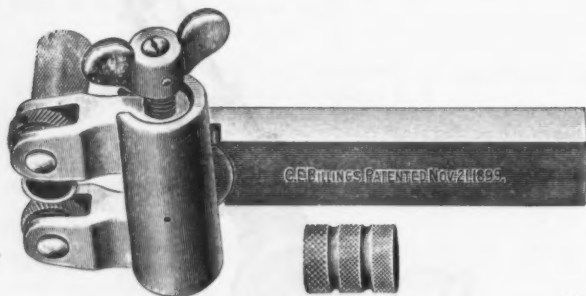


Fig. 3.—Crescent Frog Sprinkler.

sprinklers—a frog enameled in green and striped. In use, it is stated, it covers an area of 30 to 40 feet in diameter.

Billings' Improved Nurling Tool.

The Billings & Spencer Company, Hartford, Conn. are introducing the nurling tool herewith illustrated. The movable arms holding the nurls, in connection with the rocking joint, have a positive opening and closing movement in parallel lines, actuated by a right and left hand screw, moving the nurls toward and from each



Billings' Improved Nurling Tool

other. It is explained that the nurls will center themselves to the work, and that nurling can be easily done with this tool which it is impossible to accomplish with any other now on the market. The nurls of three pitches carried in stock include coarse, medium and fine. The tool is designed for use in engine lathes for nurling metal.

The Standorette.

The accompanying cuts represent the Standorette, put on the market by D. H. Allen & Co., Miamisburg, Ohio. The device has a top 18 x 24 inches, made of quartered oak, handsomely polished. The hinged strip along the



Fig. 1—The Standorette.

bottom edge is turned up when the top is tilted as in Fig. 1, and is turned down flush when the top is placed horizontally. The adjusting parts or attachments are shown in detail in Fig. 2. The attachments are nickel plated or enameled, as desired. The pedestal and support for the top is made of steel tubing, enameled in black. The several parts, as shown in Fig. 3, are screwed together without the aid of tools, as there are no screws, bolts or nuts used in the construction of the separate parts. Putting together or taking apart can be accomplished, the manufacturers state, by a woman or child in a few moments. The parts are screwed together in a manner to make the strongest possible construction. The legs are close to and parallel with the floor, so as to be out of the way. One leg is preferably made shorter, in order to offer the least possible obstruction on the side opposite

the position intended for the top. A tube telescopes in the upright for adjustment in height. The total weight is given as 15 pounds. The top of the standorette has four independent adjustable movements—the vertical, for adjusting the height of the top suitable for a sitting or standing position; the horizontal, for bringing the top into any convenient position without shifting chair or standorette, also for swinging the top around when rising

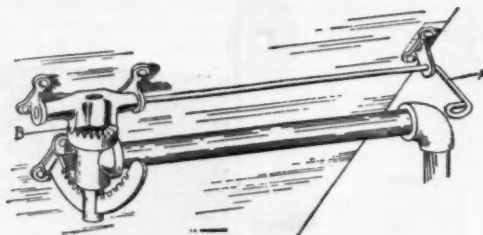


Fig. 2.—Adjusting Device.

from the chair; the tilting, for adjusting the top at any angle from a vertical to a horizontal position; and rotating movement, for turning the top in either direction independent of the movement of the arm which supports it. Provision is made for this independent rotating movement in order to keep the top at all times square to the front, irrespective of the position of the arms. The

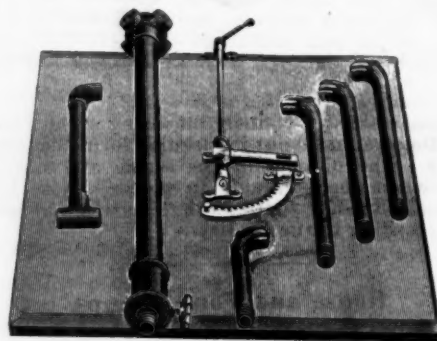


Fig. 3—Packed Flat for Shipping

standorette is designed for use in the home, studio, sick room, school and sewing room, hospital, library and office. It is referred to as a combined easel, book rest, music stand, drawing, reading, sewing, invalid and card stand.

The S Center Wire Stretcher.

The Buckeye Ratchet Company, Cleveland, Ohio, are putting on the market a center tightener, or inside ratchet, illustrated herewith. This ratchet goes on the wire at any point, saves the boring of holes through the posts, and it is unnecessary, it is explained, to cut the



The S Center Wire Stretcher.

wire to apply it. It is a one piece, self locking ratchet, requiring no nails or bent pieces of wire to lock it, and it is so constructed, the manufacturers state, that it will not break under the greatest strain.

— F. D. Parsons and Warren K. Clouser have purchased the wholesale and retail Hardware, Stove and Plumbing business formerly conducted by C. L. Darlington, New Bloomfield, Pa., and will continue under the style of Parsons & Clouser.

Current Hardware Prices.

REVISED FEBRUARY 27, 1900.

General Goods.—In the following quotations General Goods—that is, those which are made by more than one manufacturer, are printed in *Italics*, and the prices named represent those current in the market as obtainable by the fair retail Hardware trade, whether from manufacturers or jobbers. They apply to such quantities of goods as are usually purchased by retail merchants. Very small orders and broken packages often command higher prices, while lower prices are frequently given to larger buyers.

Special Goods.—Quotations printed in the ordinary type (Roman) relate to goods of particular manufacturers, who are responsible for their correctness. They usually represent the prices to the small trade, lower prices being obtainable by the fair retail trade, from manufacturers or jobbers.

Cut Prices.—In the present condition of the market, while many advanced prices are announced by the manufacturers, lower prices are often made by the wholesale trade who have stocks on hand purchased at former quotations.

Names of Manufacturers.—For the names and addresses of manufacturers see the advertising columns and also THE IRON AGE INDEX SUPPLEMENT (April 6, 1899), which gives a classified list of the products of our advertisers and thus serves as a DIRECTORY of the Iron, Hardware and Machinery trades.

Standard Lists.—A new edition of "Standard Hardware Lists" has been issued and contains the list prices of many leading goods.

Additions and Corrections.—The trade are requested to suggest any improvements with a view to rendering these quotations as correct and as useful as possible to Retail Hardware Merchants.

Adjusters Blind—

Domestic, # doz. \$5.00... 33 1/2 @ 33 1/2 10%
North's... 10%
Zimmerman's—See Fasteners, Blind.

Window Stop—

Ives' Patent... 25 1/2 @ 25 1/2
Taplin's Perfection... 50%

Ammunition—See Caps, Cartridges, Shells, &c.

Anvils—American—

Eagle Anvils... # 7 1/2 @ 7 1/2
Hay-Budden, Wrought... 9 @ 9 1/2
Horseshoe brand, Wrought... 9 1/2 @ 9 1/2
Samson... # 7 1/2 @ 8 1/2
Trenton, Wrought... # 8 1/2 @ 8 1/2

Imported—

Armitage's Mouse Hole... 8 1/2 @ 9 1/2
Peter Wright's... 9 1/2 @ 9 1/2

Anvil, Vise and Drill—

Millers Falls Co., #18.00... 20%

Apple Parers—See Parers, Apple, &c.

Augers and Bits—

Common Double Spur... 60 @ 10 @ 10 @ 70%
Boring Machine Augers... 60 @ 10 @ 10 @ 70%

Car Bits, 12-in. twist... 60 @ 10 @ 10 @ 70%
Jennings' Pattern:
Auger Bits... 60 @ 10 @ 10 @ 70%

Ford's Auger and Car Bits... 60 @ 10 @ 10 @ 70%

Forstner Pat. Auger Bits... 40 @ 10 @ 10 @ 70%
C. E. Jennings & Co.:
No. 10 ext. lip. R. Jennings' list... 40 @ 10 @ 10 @ 70%

No. 30. R. Jennings' list... 50 @ 10 @ 10 @ 80%
Russell Jennings... 25 @ 10 @ 10 @ 70%
L'Hommedieu Car Bits... 15 @ 10 @ 10 @ 70%

Pugh's Black... 20%
Pugh's engravings Pattern... 35%
Snell's Auger Bits... 60%
Snell's Auger Bits... 60%
Snell's Car Bits, 12-in. twist... 60%
Wright's Jennings Bits (R. Jennings' list)... 50%

Bit Stock Drills—

Standard list... 65 @ 10 @ 70%

Expansive Bits—

Clark's small, #18; large, #26... 50 @ 10 @ 70%
Lavigne's Clark's Pattern, No. 1, # doz., #26; No. 2, #18... 50 @ 10 @ 70%
Steer's No. 1, #26; No. 2, #18... 40 @ 10 @ 70%
Swan's... 60%

Gimlet Bits—

Common Double Cut... gro. \$2.75 @ 3.25
German Pattern... gro. \$5.00 @ 5.50
Double Cut, makers' lists... 50 @ 10 @ 70%

Hollow Augers—

Ames... 25 @ 10 @ 70%
Bonney's Adjustable, # doz... \$10.00
New Patent... 25 @ 10 @ 70%
Universal... 30%

Ship Augers and Bits—

Ford's... 40%
Snell's... 40%
L'Hommedieu's... 15 @ 10 @ 15 @ 10%
Watrous... 40 @ 10 @ 70%

Awl Hafts, See Hafts, Awl.

Awls—

Bradley's:
Handled... gro. \$2.75 @ 3.10
Unhandled, Shouldered gro. \$5 @ 5.50
Unhandled, Patent... gro. 66 @ 70%

Peg Awls:
Unhandled, Patent... gro. 31 @ 34
Unhandled, Shouldered... gro. 65 @ 70%

Scratch Awls:
Handled, Common... gro. \$3.50 @ 4.00
Handled, Socket... gro. \$11.50 @ 12.00

Awl and Tool Sets—See Sets, Awl and Tool.

Axes—

First Quality, best brands... \$6.25 @ 6.50
First Quality, other brands... \$5.75 @ 6.00
Jobbers' Special Brands:
Good Quality... \$5.50 @ 5.75
Best Quality... \$6.00 @ 6.50
Cheap, Handled Axes... \$5.50 @ 5.75
Beveled, add 25c doz.

Axle Grease—See Grease, Axle.

Axles—

Concord, loose collar... 6 1/2 @ 6 c
Concord, solid collar... 6 1/2 @ 6 c
No. 1 Common... 5 c @ 4 1/2 c
No. 1 1/4 Com. New Style... 5 1/2 @ 5 1/2 c
No. 2, Solid Collar... 5 1/2 @ 5 1/2 c
Nos. 7, 8, 11 to 14... 60 @ 10 %
Nos. 7, 8, 11 to 14, 100 sets... 60 %
Nos. 15 to 18... 60 %
Nos. 19 to 22... 60 @ 10 %

Boxes, Axle—

Common and Concord, not turned... lb. 50
Common and Concord, turned... lb. 60
Half Patent... lb. 90

Balances—

Sash—
Caldwell new list... 50%
Fulman's... 62 1/2 %

Spring—

Spring Balances... 50 @ 50 @ 55 %
Chattillon's Light Spg. Balances... 40 @ 10 %
Chattillon Straight Balances... 40 %
Chattillon Circular Balances... 50 %
Chattillon's Large D'n'l... 30 %

Barb Wire—See Wire, Barb.

Bars—Crow—

Steel Crowbars, 10 to 40 lb., per lb... 4 @ 4 1/2

Beams, Scale—

Scale Beams, List Jan. 12, '98... 30 @ 30 @ 35 %
Chattillon's No. 1... 30 @ 30 @ 35 %
Chattillon's No. 2... 40 %

Beaters—Egg—

Standard Co.:
No. 5 Steel Handle Dover... # gro. \$6.50
No. 10 Cast Handle Dover... # gro. \$8.00
No. 10 St-el Handle Dover... # gro. \$8.00
No. 15 Extra Heavy Steel... # gro. \$11.00

Rival, # gro... \$15.00
Taplin Mfg. Co.:
gro... \$15.00

No. 50 Small Family size... \$8.50
No. 100 Regul r Family size... \$8.50
No. 102 Regular Family size, tinned... \$9.50
No. 150 Large Family size... \$12.00
No. 152 Large Family size, tinned... \$17.00

Lyon's Standard 12-in... # doz. \$1.75
Wonder (S. S. & Co.)... # gro. \$1.75

Bellows—

Blacksmith—
Standard list... 70 @ 70 @ 75 %

Inch... 30 32 34 36 38 40
Each... \$3.70 3.95 4.25 4.50 4.75 5.00
Extra Length:
Each... \$4.25 4.50 4.75 5.00 5.25 5.50 5.75 6.00 6.25

Molders—

Inch... 9 10 11 12 14 16
Doz... \$6.75 7.25 8.50 9.50 12.00 14.50

Hand—

Inch... 6 7 8 9 10 12
Doz... \$3.75 4.25 4.50 5.00 5.75 6.75

Bells—Cow—

Ordinary goods... 75 @ 10 %
High grade... 70 @ 70 @ 10 %
Jersey... 75 @ 75 @ 10 %
Texas Star... 50 @ 10 %

Door—

Gong, Yankee... 55 %
H. & E. Mfg. Co.'s... 50 @ 10 %
Lever and Pull, Sargent's... 33 1/2 @ 10 %

Hand—

Hand Bells, Polished... 65 @ 65 @ 10 %
White Metal... 65 @ 65 @ 10 %
Nickel Plated... 50 @ 50 @ 10 %
Swiss... 60 @ 60 @ 10 %

Miscellaneous—

Farm Bells... lb. 2 @ 2 1/2
Steel Alloy Church and School... 50 @ 10 @ 60 %
Willmot & Hobbs Mfg. Co., Gongs... 70 %

Belting

Rubber—
Common Standard... 70 @ 10 @ 75 %
Standard... 60 @ 10 @ 70 %
Extra... 60 @ 60 @ 10 %
High Grade... 60 @ 60 @ 10 %

Leather—

Extra Heavy, Short Lap... 50 @ 10 @ 50 @ 10 @ 55 %
Regular Short Lap... 60 @ 60 @ 10 %
Standard... 60 @ 10 @ 60 @ 10 @ 55 %
Light Standard... 70 %

Cotton—

Rossendale-Reddaway B. & H. Co.:
Sphinx Brand... 60 @ 10 %
Durable Brand... 70 %

Bench Stops—See Stops, Bench.

Benders and Upsetters, Tire—

Green River Tire Benders and Upsetters... 20 %
Ill. Iron & Bolt Co... 40 @ 40 @ 55 %
Stoddard's Lightning Tire Upsetters... 40 @ 50 %

Bicycle Goods—

Lane's Cycle Hanger... 33 1/2 @ 25 %
John S. Long's Son's 1899 list:
Chain... 50 %
Parts... 50 %
Spokes... 50 %
Tubs... 60 %

Bits—

Auger, Gimlet, Bit Stock Drills, &c.—
See Augers and Bits.

Bit Holders—See Holders.

Blind Adjusters—See Adjusters, Blind.

Blind Fasteners—See Fasteners, Blind.

Blind Staples—See Staples, Blind.

Blocks—Tackle—

Common Wooden... 70 @ 70 @ 10 %
Cleveland Steel... 60 @ 10 @ 60 @ 10 %
Eddy's Steel... 60 @ 10 %
Hartz Steel... 50 @ 10 %
Ford's Star Brand Self Lubricating... 60 @ 10 %

Hollow Steel, Ford's Pat. Star Brand... 50 @ 10 %
Lane's Patent Automatic Lock and Junior... 30 %
Stowell's Novelty, Mal. Iron... 50 %
See also Machines, Hoisting.

Boards, Stove—

1899 List:
Zinc... 30 @ 35 1/2 %
Crystal and Embossed... 40 %

Boils—

Carriage, Machine, &c.—
Common, list Jan. 30, '95... 45 @ 50 @ 55 %
Norway Iron, \$3.00, list Oct. 7, '86... 75 @ 75 @ 10 %
Phila. Eagle, \$3.00 list May 24, '99... 75 @ 10 @ 75 @ 10 @ 55 %

Bolt Ends, list Jan. 30, '95... 50 @ 50 @ 10 @ 55 %
Machine, list Oct. 1, '99... 50 @ 50 @ 10 @ 55 %

Note.—Jobbers' prices on bolts are now generally lower than manufacturers'.

Door and Shutter—

Cast Iron Barrel, Round Brass Knob:
Inch... 3 4 5 6 8
Per doz... \$0.33 35 45 57 70

Cast Iron Spring Foot:
Inch... 6 8 10
Per doz... \$1.00 1.25 1.75

Cast Iron Chain, Flat, Japanned:
Inch... 6 8 10
Per doz... \$0.35 1.20 1.50

Cast Iron Shutter, Brass Knobs:
Inch... 6 8 10
Per doz... \$0.60 .90 1.15

Wrought Barrel Brass Knob:
Inch... 3 4 5 6 8
Per doz... \$0.44 .50 .61 70 1.23

Wrought Barrel... 70 @ 10 @ 75 @ 55 %
Wrought... Bronzed... 40 @ 50 @ 10 %
Wrought Flush, B. K... 60 @ 10 @ 60 @ 10 %
Wrought Shutter... 40 @ 10 @ 10 @ 60 @ 55 %
Wrought Square Neck... 60 @ 50 @ 10 %
Wrought Sunk... 60 @ 50 @ 10 %
Ives' Patent Door... 63 1/2 @ 69 1/2 @ 10 %

Stove and Plow—
Plow... 60 @ 10 @ 60 %
Stove... 60 @ 50 @ 10 %

Tire—

Common... 57 @ 57 @ 10 %
American Sewing Company:
Norway Phila., list Oct. 18, '84... 70 %
Eagle Phila., list Oct. 18, '84... 72 1/2 %
Bay State, list Dec. 28, '99... 57 %
Franklin Moore Co.:
Norway Phila., list Oct. 18, '84... 70 %
Eagle Phila., list Oct. 18, '84... 72 1/2 %
Solings, list Dec. 28, '99... 57 %
Port Chester Bolt & Nut Company:
Empire, list Dec. 28, '99... 57 %
Keystone Phila., list Oct. '84... 72 1/2 %
Norway Phila., list Oct. '84... 70 %

Borers, Tap—

Borers Tap, Ring, with Handle:
Inch... 1 1/4 1 1/2 1 3/4
Per doz... \$3.50 4.50 5.00 6.50

Inch... 2 1/4 2 1/2 2 3/4
Per doz... \$7.50 10.25

Enterprise Mfg. Co., No. 1, \$1.25; No. 2, \$1.65; No. 3, \$2.50 each... 25 @ 30 %

Boring Machines—See Machines, Boring.

Boxes, Mitre—

Seavey's, per doz., \$30... 40 %

Braces—

Note.—Most Braces are sold at net prices.

Common Ball, American... \$1.10 @ 1.20
Barber's... 10 @ 10 @ 10 @ 60 @ 10 %
Fray's Genuine Spofford's... 50 @ 10 @ 55 %
Fray's No. 70 to 120, 81 to 123, 207 to 414... 50 @ 10 @ 55 %
P. S. & W. Co., Peck's Patent... 50 @ 10 @ 60 %

Brackets—

Cast Iron, plain... 60 @ 10 @ 70 @ 10 %
Wrought Steel... 70 @ 10 @ 75 %

Bradley's Wire Shelf:
Full cases... 80 %
Broken cases... 75 @ 10 %

Bright Wire Goods—See Wire and Wire Goods.

Broilers—

Wire Goods Co... 70 @ 70 @ 10 %

Buckets, Well and Fire—See Pails.

Bucks, Saw—

Hoosier... # gro. \$36.00

Bull Rings—See Rings, Bull.

Butts—Brass—

Wrought list Sept., '98... 25 @ 25 @ 33 1/2 %
Cast Brass, Tiebout's... 50 %

Cast Iron—

Fast Joint, Broad... 50 @ 10 %
Fast Joint, Narrow... 50 @ 10 %
Loose Joint... 65 @ 5 @ 70 %
Loose Pin... 65 @ 5 @ 70 %
Mayer's Hinges... 65 @ 5 @ 70 %
Parliament Butts... 65 @ 5 @ 70 %

Note.—Jobbers often undersell manufacturers.

Wrought Steel—

Loose Joint... 50 @ 10 %
Table and Back Flaps... 50 @ 10 %
Narrow and Broad... 70 @ 5 @ 10 %
Inside Blind... 70 @ 5 @ 10 %
Loose Pin... 70 @ 5 @ 10 %
Loose Pin, Ball and... 70 @ 5 @ 10 %

Steeple Tip

Bronzed Wrt. Nar. and Inside Blind Butts... 50 @ 10 @ 50 @ 10 @ 55 %

Cages, Bird—

Hendryx, Brass:
3000, 5000, 1100 series... 5 %
1200 series... 33 1/2 %
200, 300, 600 and 900 series... 40 @ 10 %
Hendryx Bronze:
700, 800 series... 40 @ 10 %
Hendryx Enamelled... 40 @ 10 %

Callipers—See Compasses.

Calks, Toe and Heel—

Blunt... per lb. 5 @ 5 1/2 c
Sharp... per lb. 5 1/2 @ 5 c
Perkins' Blunt... # 4 @ 5 c
Perkins' Sharp... # 4 @ 5 c

Can Openers—See Openers, Can.

Cans, Milk—

Buffalo Pattern: 5 8 10 gal.
\$3.60 \$4.00 .33 1/2 %
Illinois Pattern... \$2.40 3.10 3.50 .33 1/2 %
Iowa Pattern... 2.40 3.35 3.75 .33 1/2 %
30 30 40 qts.
New York Pattern... 4.35 4.60 .33 1/2 %
Baltimore Pattern... 3.10 4.45 4.70 .33 1/2 %

Cans, Oil—

Galvanized Blue Band, 1-gal., # doz... \$1.75 @ 2.00
S. S. & Co., Galvanized Family with faucet, 5-gal., # gro. \$54; 5-gal., #83; 10-gal., #120.00

Glass Oil—

doz. \$1.30 @ 2.20

Caps—Percussion—

Eley's E. B... 50c
G. D... per M 32 @ 36c
F. L... per M 37 @ 40c
G. E... per M 47 @ 50c
Musket... per M 57 @ 60c

Primers—

Berdan Primers, \$1.00... 5 %

Gimlets—
 Nail, Metal, Assorted, gro. \$1.40@1.75
 Spike, Metal, Assorted, gro. \$3.00@3.50
 Nail, Wood Handled, Assorted,
 gro. \$4.00@4.50
 Spike, Wood Handled, Assorted,
 gro. \$5.00@5.25

Glass, American Window

List Nov. 18, 1898.

Small lots from store:
 Eastern, First Bracket.....85¢10¢
 Eastern, All Other Brackets 85¢10¢
 From Jobbers or Factory, with Freight
 Allowance, except in Eastern district:
 Corlunds, Single Strength.
 First Bracket.....85¢25¢
 Second and Third Brackets.....89¢
 All Above.....90¢25¢
 Corlunds Double Strength
 First Five Brackets.....89¢
 60 inch Bracket.....90¢
 70 to 100 inch Bracket, inclusive
 90¢10¢25¢
 All Above.....90¢25¢

Glue-Liquid, Fish-

List A, Bottles or Cans, with Brush.
 37 1/2¢60¢
 List B, Cans (1/2 pts., pts., qts.).....35¢15¢
 List C, Cans (1/2 gal., gal.).....85¢45¢

Glue Pots—See Pots, Glue.

Grease, Axle-

Common Grade.....gro. \$5.00@5.00
 Allerton's Axle:
 10 Tins, 5 gr.....\$9.00
 5 Tin Pails, 5 doz., \$2.90; 5 b., \$3.00;
 10 b., \$5.00.
 35 lb wood pails.....5 doz. \$12.00
 Dixon's Everlasting.....10-b pails, ea. 85¢
 Dixon's Everlasting, in bxs.....doz. 1 b.
 \$1.20; 2 b. \$2.00

Grindstone Fixtures—

See Fixtures, Grindstone.

Gun Powder—See Powder.

Hack Saws—See Saws.

Hafts, Awi—
 gro.
 Peg Patent, Leather Top.....\$4.90@5.25
 Peg Patent, Plain Top.....\$3.50@3.75
 Sewing, Brass Ferrule.....\$1.50@1.60
 Saddlers', Brass Ferrule.....\$1.25@1.45
 Peg, Common.....\$1.25@1.35
 Broad, Common.....\$1.50@1.75

Halters and Ties—

Covert Mfg. Co., Web.....45¢25¢
 Covert Mfg. Co., Jute Rope.....45¢25¢
 Covert Mfg. Co., Sisal Rope.....30¢25¢
 Covert's Saddlery Works, 98 List, W. b.....80¢10¢
 Covert's Saddlery Works, Leather 60¢10¢
 Covert's Saddlery Works, Jute.....60¢25¢
 Covert's Saddlery Works, Sisal.....60¢
 Covert's Saddlery Works, Manila.....60¢25¢
 Covert's Saddlery Works, Cotton.....70¢

Hammers—

Handled Hammers—
 Heller's Machinists'.....40¢40¢55¢
 Magnetic Tack, Nos. 1, 2, 3, \$1.25, \$1.50,
 \$1.75.....40¢10¢
 Peck, Stow & Wilcox.....40¢40¢55¢
 Fayette B. Plumb:
 Artisans' Choice, A. E. Nail.....33¢45¢
 Engineers' and B. S. Hand.....50¢10¢
 Machinists' Hammers.....60¢10¢
 A. E. & A. E., Bell Face Nail.....33¢45¢
 Riveting and Finers.....33¢45¢
 Sargent's C. S. New List.....40¢45¢10¢

Heavy Hammers and

Sledges—
 8 lb. and under.....lb. 45¢
 4 to 8 lb.....lb. 55¢ 70¢10¢75¢
 Over 8 lb.....lb. 80¢ 10¢
 Note.—Lower prices sometimes made
 by jobbers.

Handcuffs and Leg Irons

See Police Goods.

Handles—

Agricultural Tool Handles—
 Hoe, Rake, Fork, &c.....50¢10¢60¢
 Shovel, &c., Wood D Handle, 50¢10¢

Cross-Cut Saw Handles—

Atkins.....40¢75¢
 Champion.....45¢45¢10¢
 Disston's.....50¢

Mechanics' Tool Handles—

Auger, assorted.....gro. \$2.40@3.60
 Auger, large.....gro. \$2.85@3.00
 Brad Aug.....gro. \$1.50@1.75
 Chisel Handles:
 Apple Tanged Firmer, gro. ass'd.
 \$2.35@2.35; large, \$2.75@3.00.
 Hickory Tanged Firmer, gro. ass'd.
 \$1.75@2.25; large, \$2.35@2.50.
 Apple Socket Firmer, gro. ass'd.
 \$1.75@2.25; large, \$2.35@2.50
 Hickory Socket Firmer, gro. ass'd.
 \$1.60@1.75; large, \$1.75@2.00
 Hickory Socket Framing, gro. ass'd.
 \$1.50@1.75; large, \$2.05@2.25
 File, assorted.....gro. \$1.00@1.15
 Hammer, Hatchet, &c., &c., 50¢10¢
 Hand Saw, Varished, doz. 75¢80¢
 Not Varished.....50¢60¢
 Plane Handles:
 Jack, doz. \$3@5¢; Jack Bolted.....
 55¢60¢
 Fore, doz. 35¢38¢; Fore, Bolted.....
 70¢75¢

Hangers—

Barn Door, New Pattern, Round
 Groove, Regular:
 Inch.....3 4 5 6 8
 Dos.....\$1.10 1.45 1.80 2.10 2.75
 Barn Door, New England Pattern,
 Check Back, Round Groove, Reg-
 ular:
 Inch.....3 4 5 6
 Dos.....\$1.50 2.00 2.60 3.25

Chicago Spring Butt Co.:

Friction.....25¢
 Oscillating.....25¢
 Big Twin.....25¢
 Chisels & Moore Mfg. Co.:
 Advance.....55¢
 Cleveland.....60¢
 Baggage Car Door.....50¢
 Elevator.....40¢
 Railroad.....55¢
 Cast Ball Bearing, 7/8 doz. pair \$8.50
 No. 10 Roller Bearing, doz. pr. 5.50
 No. 20 Roller Bearing, doz. pr. 4.50
 Nickel.....50¢
 J. G. C.....50¢2¢10¢
 Lane Bros.:
 Parlor, Standard.....40¢5¢34¢
 Parlor, New Model.....40¢34¢
 Barn Door, Standard.....50¢10¢10¢
 Covered.....50¢10¢10¢
 Special.....60¢25¢
 Lawrence Bros.:
 Crown.....60¢
 New York.....60¢
 Sterling.....60¢
 McKinnin Mfg. Co.:
 No. 1, Standard, \$18.....60¢10¢
 No. 1, Special, \$19.....60¢10¢
 Stowell Mfg. and Foundry Co.:
 Badger.....60¢
 Baggage Car Door.....50¢
 Climax Anti-Friction.....50¢
 Elevator.....50¢10¢
 Intermediate.....50¢
 Magic.....50¢
 Matchless.....50¢10¢
 Nansen.....50¢10¢
 Parlor Door.....50¢
 Railroad.....50¢10¢
 Street Car Door.....50¢10¢
 Steel, Nos. 300, 400, 600.....50¢
 Wild West.....50¢25¢
 Zenith for Wood Track.....50¢10¢
 Taylor & Boggis Foundry Co.:
 Kidder.....50¢50¢10¢
 Van Wagner & Williams Hdq. Co.:
 American Trackless.....35¢41¢
 Wilcox Mfg. Co.:
 Bike Roller Bearing.....60¢10¢
 C. J. Roller Bearing.....60¢10¢
 Cycle Ball Bearing.....50¢
 L. T. Roller Bearing.....50¢10¢
 New Era.....50¢10¢
 New Richards.....50¢10¢
 O. K. Roller Bearing.....60¢10¢
 Handle Improved.....60¢10¢
 Richards' Improved.....60¢10¢
 Richards' Single Track.....50¢10¢
 Wilcox Dwarf Roller Bearing.....40¢10¢
 Wilcox Ives.....60¢10¢
 Wilcox Tandem Roller Bearing.....60¢10¢
 Wilcox Trolley Ball Bearing.....40¢
 Wilcox Trolley Roller Bearing.....50¢
 Wilcox Trolley Roller Bearing.....40¢10¢

Harness Menders—See

Menders.

Harness Snaps—See Snaps.

Hasps—

McKinney's Perfect Hasp, 7/8 doz. \$1.10
 40¢10¢

Wrought Hasps, Staples, &c.—See

Wrought Goods.

Hatchets—

Best Brands.....40¢10¢50¢
 Cheaper Brands.....50¢10¢50¢10¢50¢
 Note.—Net prices often made.

Hay and Straw Knives—

See Knives.

Hinges—

Blind and Shutter Hinges—
 Acme and Dixie Shutter:
 No.....1 1 1/2 2 3 4
 Doz. pair.....\$0.70 .65 .80 .65
 Buffalo and Queen City Reversible
 Shutter:
 No.....1 1 1/2 2 3 4
 Doz. pair.....\$0.70 .65 .80 .65
 1888 Old Pattern Blind Hinge:
 No.....1 3 5
 Doz. pair.....\$0.80 1.45 2.35
 Parker.....70¢75¢
 North's Automatic Blind Fixtures, No.
 2, for Wood, \$9.00; No. 4, for Brick,
 \$11.50.....10¢
 Reading's Gravity.....75¢10¢
 Sargent's, No. 1, 3, 5.....60¢10¢
 Sargent's, No. 11 & 13.....7¢10¢70¢10¢10¢
 Wrightville Hardware Co.:
 Acme, Lull & Porter.....65¢10¢55¢
 Buffalo Gravity Looking, Nos. 1, 3
 and 5.....65¢10¢10¢
 Champion Gravity Looking, No. 75, 75¢
 1888, Old Pat'n, Nos. 1, 3 & 5.....75¢
 Tip Pattern, Nos. 1, 3 & 5.....75¢
 Double Looking, Nos. 20 and 25.....70¢
 Empire, Nos. 101 and 103.....65¢10¢
 Niagara Gravity Looking, Nos. 1, 3
 and 5.....65¢10¢10¢
 Noiseless, Nos. 50, 60, 65 and 65.....65¢10¢25¢
 O. S. Lull & Porter.....65¢10¢10¢
 Pioneer, Nos. 080, 45 and 64.....65¢10¢55¢
 Steamboat Gravity Looking, No. 10.....75¢
 Stanley's Steel Gravity Blind Hinges,
 7/8 doz. sets \$1.30.....20¢10¢

Gate Hinges—

Clark's or Shepard's—Dox. sets:
 No.....1 2 3
 Hinges with Latches, \$1.50 2.50 4.25
 Hinges only.....1.50 1.55 3.20
 Latches only.....0.70 0.70 1.20
 New England:
 With Latch.....doz. \$1.75@1.80
 Without Latch.....doz. \$1.40@1.45
 Reversible Self-Closing:
 With Latch.....doz. \$1.65@1.75
 Without Latch.....doz. \$1.80@1.85
 Western:
 With Latch.....doz. \$1.60@1.65
 Without Latch.....doz. \$1.00@1.05

Spring Hinges—

Holdback, Cast Iron, gro. \$2.00@2.00

Non-Holdback, Cast Iron—

gro. \$7.00@7.50

J. Bardsley

Bardsley's Patent Cheeking.....10¢
 Bommer Bros.:
 Bommer's.....33¢45¢
 Chicago Spring Butt Co.:
 Chicago.....20¢
 Garden City Engine House.....20¢
 Keene's Saloon Door.....20¢
 Triple End.....40¢
 Coleman Hdq. Co.:
 Champion Holdback.....7/8 gr. \$10.00
 J. G. C.....7/8 gr. \$9.50
 Nickel.....7/8 gr. \$9.00
 Lawson Mfg. Co.:
 Matchless.....25¢
 Matchless Pivot.....40¢
 Payson Mfg. Co.:
 Oblique, Dbl. Acting.....50¢50¢25¢
 Stover Mfg. Co.:
 Ideal, No. 10, Detachable, 7/8 gr.....\$1.25
 Ideal, No. 4.....7/8 gr. \$9.00
 New Idea No. 1.....7/8 gr. \$9.00
 New Idea, Double Acting.....45¢
 Van Wagner & Williams Hdq. Co.:
 Acme, Wrt. Steel.....30¢
 American.....30¢
 Columbia, No. 14.....7/8 gr. \$9.00
 Columbia, No. 18.....7/8 gr. \$25.00
 Columbia, Adjustable.....30¢
 Gem, new list.....25¢
 O'over Leaf.....7/8 gr. \$12.50
 Oxford, new list.....25¢

Wrought Iron Hinge—

Strap and T Hinges, &c., List Mar.
 15, 1898:

Light Strap Hinges.....60¢45¢
 Heavy Strap Hinges.....70¢
 Light T Hinges.....50¢10¢
 Heavy T Hinges.....60¢10¢
 Extra Heavy T Hinges.....60¢

NOTE.—Change in base discounts.

Rolled Plate.....7/8 to 12 in. lb. 5¢@3¢4¢

Screw Hook.....1 lb. to 20 in. lb. 5¢@3¢4¢

and Strap.....25 to 36 in. lb. 5¢@3¢4¢

Screw Hook and Eye:
 3/4@1 inch.....lb. 5¢@5¢4¢
 1/2-inch.....lb. 6¢@6¢4¢
 1-inch.....lb. 8¢@8¢4¢

Hoes—

Eye—
 Scovill and Oval Pattern.....60¢5¢60¢10¢5¢
 Grub. List Feb. 23, 1899.....65¢65¢10¢
 D. & H. Scovill.....35¢35¢25¢

Handled—

Aug. 1, 1899, List:
 Field and Garden.....75¢25¢
 Ladies', Boys', Toy and Onion.....70¢10¢10¢
 Street and Mortar.....75¢75¢4¢
 Cotton.....70¢10¢10¢5¢25¢
 Planters'.....70¢30¢
 Weeding.....75¢
 Note.—Manufacturers and jobbers use
 a diversity of lists, and often sell at net
 prices.

Ft. Madison Crucible Garden Hoe.....75¢25¢
 Ft. Madison Crescent Cultivator Hoe.....75¢10¢25¢
 Ft. Madison Mattock Hoe, 7/8 doz. \$4.50
 Ft. Madison Sprouting Hoe, 7/8 doz. \$4.80
 Ft. Madison Dixie Tobacco Hoe.....75¢20¢
 Warren Hoe.....60¢

Hog Rings and Rings—

See Rings and Rings.

Holisting Apparatus—

See Machines, Holisting.

Hollow Ware—

See Ware, Hollow.

Holders—

Bit—
 Angular, 7/8 doz. \$24.00.....45¢10¢
 File and Tool—
 Nicholson File Holders and File Hand-
 les.....33¢45¢

Hooks Cast Iron—

Bird Cage, Reading.....50¢10¢60¢
 Bird Cage, Sargent's List.....35¢10¢
 Clothes Line, Sargent's List.....40¢40¢10¢
 Clothes Line, Stowell's.....70¢
 Clothes Line, Reading List.....85¢10¢65¢10¢10¢
 Coat and Hat, Stowell's.....70¢
 Coat and Hat, Reading.....70¢75¢
 Coat and Hat, Sargent's List.....35¢10¢
 Coat and Hat, Wrightville.....65¢10¢
 Harness, Reading List.....70¢10¢75¢

Wire—

Belt.....75¢75¢10¢
 Atlas Coat and Hat.....50¢50¢10¢
 Clear Harness.....60¢10¢
 Wire Coat and Hat:
 Acme.....60¢60¢55¢
 B. Brace, Chief and Clear.....70¢70¢5¢
 Gem.....50¢10¢
 Bright Wire Goods—See Wire

Wrought Iron—

Box, or Case, Octagon Steel.....doz. \$3.10@3.20
 Cotton.....doz. \$1.05@1.15
 Picture, T. & S. Mfg. Co.....75¢
 Tassel, T. & S. Mfg. Co.....50¢10¢
 Wrought Staples, Hooks, &c.—
 See Wrought Goods.

Miscellaneous—

Bush, Light, doz. \$5.50; Medium,
 \$6.00; Heavy, \$6.50
 Grass.....Nos. 1 2 3 4
 Best.....\$1.50 1.75 2.00
 Common.....\$1.40 1.60 1.75
 Potato and Manure.....75¢15¢
 Whiffletres.....lb. 4¢

Hooks and Eyes:

Brass.....60¢10¢10¢70¢
 Malleable Iron.....70¢5¢70¢10¢
 Covert Saddler / Works' Self Looking
 Gate and Door Hook.....60¢10¢
 Crown Picture.....50¢10¢
 Bench Hooks—See Bench Stops.
 Corn Hooks—See Knives, Corn.

Horse Nails—See Nails, Horse

Horseshoes—

See Shoes, Horse.

Hose, Rubber—

Garden Hose, 1/2-inch:
 Competition.....ft. 4¢4¢4¢
 3-ply Standard.....ft. 5¢6¢6¢
 4-ply Standard.....ft. 8¢9¢9¢
 3-ply extra.....ft. 9¢10¢
 4-ply extra.....ft. 11¢12¢
 Cotton Garden, 1/2-in., coupled:
 Low Grade.....ft. 5¢7¢
 Fair quality.....ft. 8¢9¢

Irons—

Sad—
 From 1 to 10.....lb. 3¢4¢5¢
 B. B. Sad Irons.....lb. 3¢4¢
 Chinese Laundry.....lb. 5¢5¢4¢
 Chinese Sad.....lb. 3¢3¢4¢
 Mrs. Potts', per set:
 Nos. 50 55 60 65
 50¢\$1.00 75¢95¢ 95¢1.10 89¢1.05
 New England Pressing, lb. 3¢3¢4¢

Soldering—

Soldering Coppers.....lb. 23¢30¢
 Covert Mfg. Co.....20¢25¢

Pinking—

Pinking Irons.....doz. 50¢60¢

Jack Screws—See Screws.

Jacks, Wagon—

Covert Mfg. Co., Steel.....45¢25¢
 Dally.....70¢
 Ill. I. & B. Co. Common.....70¢75¢
 Lookport.....40¢40¢10¢
 Victor.....60¢
 Lane's Steel.....33¢45¢

Kettles—

Brass, Spun, Plain, List Jan. 10, '99
 15¢20¢

Enameled and Cast Iron—See Ware,
 Hollow.

Knife Sharpeners—

See Sharpeners, Knife.

Knives—

Butcher, Shoe, &c.—
 Dick's Butcher Knives.....40¢
 Foster Bros' Butcher, &c.....80¢
 Nichols' Butcher Knives.....50¢
 Hay and Straw—See Hay Knives.

Corn—

Ft. Madison Cut-Easy, 7/8 doz.....\$3.25

Drawing—

Standard List.....70¢10¢75¢4¢
 Adjustable Handle.....25¢33¢4¢
 Bradley's.....30¢
 Swan's.....70¢10¢34¢
 Watrous.....30¢10¢40¢
 L. & J. White.....20¢5¢25¢
 Castulo's Folding.....50¢50¢25¢

Hay and Straw—

Blissard.....\$5.75@6.00
 Iwan's Sickle Edge.....7/8 doz. \$1.50
 Lightning.....\$7.50

Mining—

Buffalo.....7/8 doz. \$15.00
 Smith's, 7/8 doz., Single, 93; Double, 83
 45¢50¢

Miscellaneous—

Farriers'.....doz. \$1.00@3.00
 Wostenholme's.....7/8 doz. \$3.00@3.25

Knobs—

Base, 3/4-inch, Birch, Rubber tip,
 gro.....\$1.50@1.55
 Carriage, Jap. all sizes.....gro. 30¢35¢
 Door, Mineral.....doz. 83¢88¢
 Door, Por. Jap d.....doz. 95¢97¢
 Door, Por. Nickel.....doz. \$3 10¢2.30
 Barley's Wood Door, Shutter, &c.....10¢
 Picture, Sargent's.....60¢10¢
 Snow's Victor.....50¢10¢

Ladders, Step—

Handy Ladder Works:

Length. Extended Length. Per doz.

Feet. Feet.

4.....16.00

5.....19.50

6.....24.50

7.....29.50

8.....34.00

9.....39.00

10.....43.00

11.....49.50

12.....61.00

Ladies—

Melting—
 L. & G. Mfg. Co.....60¢
 F. S. & W.....40¢40¢10¢
 Reading.....50¢10¢
 Sargent's.....40¢40¢10¢

Lanterns—

Regular Tubular.....doz. \$4.00@4.50
 Side Lift Tubular.....doz. \$4.25@4.75
 Square Lift Tubular.....doz. \$4.21@4.76
 Other Styles.....10¢10¢10¢10¢
 Mayrose Side Lift Tubular, doz. \$8.50,
 45¢10¢</

Latches, Thumb-
 Roggin's Latches.....doz. 56c@45c
Lawn Mowers-
 See Mowers, Lawn.
Leaders, Cattle-
 Small.....doz. 45c; large, 55c
 Covert aig. Co.....45c@55c

Lemon Squeezers-
 See Squeezers, Lemon.

Lifters, Transom-

Dickson:
 3 x 4 ft. x 1/2".....\$100 \$11.00
 Other sizes Iron.....70c@10c
 Other size, Brass and Bronze.....70c
 Excelsior.....60c@80c
 Payson's:
 Solid Grip Nos. 618 and 644, \$100,
 \$11.00
 Bronzed Iron.....70c

Lines-

Wire Clothes, Nos. 18 19 20
 100 feet.....\$3.50 3.75 3.25
 75 feet.....\$1.75

Ossawa Mills.
 Crown Solid Braided Chalk.....33c@45c
 Mason's, No. 0 to No. 3.....33c@45c
 Silver Lake Braided Chalk, No. 0, 86.00;
 No. 1, 86.50; No. 2, 87.00; No. 3, 87.50
 \$ gr.30c

Locks, &c.- Cabinet-
 Cabinet Locks.....35c@35c@75c
Door Locks, Latches, &c.-

[Net prices are very often made on
 these goods.]

Reading Hardware Co.....40c
 R. & E. Mfg. Co.....47c & 0c
 Sargent & Co.....40c@40c
 Slaymaker-Harry Co.....30c@35c
 Snow's Victor.....50c@10c

Elevator-

Stowell's.....33c@45c

Padlocks-

Wrought Iron, list Dec. 8, '97.....
 70c@70c@10c
 Dog Collar, S. B. Co.....40c
 R. & E. Mfg. Co. Wrt Steel & d Brass. 50c
 S. B. & Co.....40c

Sash, &c.-

Fitch's Irons and Brass.....60c@45c
 Fitch's Irons.....70c
 Ives' Patent.....62c@10c@60c@10c
 Payson's Perfect.....70c
 Payson's Signal (new list).....75c
 Reading.....60c@10c@70c

Machines-

Boring-
 Without Augers.
 Upright. Angular.
 Improved No. 3.....\$1.25 No. 1 \$5.00
 Improved No. 4.....3.75 No. 2 3.35
 Improved No. 5.....2.75
 Jennings.....2.50 8.00
 Miller's Falls.....4.75
 Snell's, Hice's Pat. 2.50 2.75
 Swan's, No. 500.....5.10 No. 200 6.45

Hoisting-
 Moore's Anti-Friction Differential Pul-
 ley Block.....30c
 Moore's Hand Hoist, with Lock Brake. 30c

Washing-
 Wayne American, \$ doz. \$27.00
 Western Star, No. 2, \$ doz. 28.00
 Western Star, No. 3, \$ doz. 30.00
 St. Louis, No. 41, \$ doz. 60.00

Mallets-
 Hickory.....45c@50c@55c
 Lignumvite.....45c@50c@55c
 Tinnars', Hickory and Applewood,
 doz.....60c@50c
 Fiber Head Stearns'.....30c@10c

Mats- Door-
 Elastic Steel (W. G. Co.).....10c

Mattocks-
 List Feb. 23, 1899.....65c@65c@10c

Meat Cutters-
 See Cutters, Meat.

Milk Cans-See Cans, Milk.

Mills- Coffee-

Box and Side, list Jan. 1, '99.....
 60c@50c@10c@55c
 Net prices are often made on some
 goods which are lower than above
 discounts.

Enterprise Mfg. Co., list Jan. 17, '99.....80c
 National, list Jan. 1, '94.....30c
 Parker's Columbia and Victor.....60c@10c
 Parker's Upright.....90c@10c@55c
 Swift, Lane Bros.....30c

Mincing Knives-
 See Knives, Mincing.

Molasses Gates-
 See Gates, Molasses.

Money Drawers-
 See Drawers, Money.

Mowers, Lawn-
 Net prices are generally quoted.

10 12 14 16-inch
 Cheap.....3.25 \$1.35@2.10
 Good.....3.50 3.75 4.00
 High Grade 4.25 4.50 4.75 5.00
 Pennsylvania and Continental 6.00@10c@55c
 Quaker City.....70c@55c
 Great American.....70c@55c

Philadelphia:

Styles M. S. C. K. T.....70c@10c
 Style A. All Steel.....60c@10c
 Style E. Low Wheel.....60c@10c
 Style F. High Wheel.....60c@10c
 Drexel and Gold Coin, low list.....50c

Nails-

Out and Wire. See Trade Report.
 Wire Nails and Brads, Papered.
 List July 20, 1899.....80c@80c@10c
 Hungarian, Finishing, Upholster-
 ers', &c. See Tacks.

Horse-

Nos. 6 7 8 9 10
 A. C.....25c 23c 22c 21c 21c
 Capewell.....19c 18c 17c 16c 16c@10c@55c
 C. B. K.....25c 23c 22c 21c 21c.....40c
 Champion.....25c 23c 22c 21c 21c.....40c@55c
 Maud S.....25c 23c 22c 21c 21c.....50c
 Neponset.....23c 21c 20c 19c 18c.....40c
 Putnam.....23c 21c 20c 19c 18c@55c
 Standard.....23c 21c 20c 19c 18c.....40c
 Str.....23c 21c 20c 19c 18c.....35c 5c
 Vulcan.....23c 21c 20c 19c 18c.....25c@10c

Picture

Brass Head. 1 1/2 2 3/4 3 3 1/2 in.
 .45 .60 .70 .95 1.00 gro.
 Por. Head.....1.10 1.10 1.10 .. gro.

Nippers, See Pliers and Nippers.

Nut Crackers-

See Crackers, Nut.

Nuts-

List Feb. 1, '99.
 Cold Punched. Off
 Mfrs. or U. S. Standard. list.
 Hexagon, plain.....3.90@4.00
 Square, plain.....3.90@4.00
 Square, C. T. & R.....3.70@3.90c
 Hexagon, C. T. & R.....4.80@4.00c

Hot Pressed:
 Mfrs. U. S. or Nar. Gauge Stan'd.
 Square.....4.30@4.50c
 Hexagon.....4.50@4.70c

Nuts-Tapped Nuts are now 2-10c.
 Higher than above.

Oakum-

Best or Government.....lb. 54c
 Navy.....lb. 44c
 U. S. Navy.....lb. 54c
 Plumbers' Spun Navy.....lb. 54c
 In carload lots 1/4 lb. off f.o.b. New
 York.

Oil Tanks-See Tanks, Oil.

Oilers-

Brass and Copper.....40c@10c@50c
 Tin or Steel.....60c@10c@70c@55c
 Zinc.....60c@50c@65c
 Malleable, Hammers Improved, No. 1,
 \$3.60; No. 2, \$4; No. 3, \$4.40 \$ doz. 20c
 Malleable, Hammers Old Pattern,
 same list.....50c@10c
 Wilmet & Hobbs Mfg. Co.....70c@70c@10c

Openers-

Can-
 French.....doz. 55c
 Iron Handle.....doz. 25c@7c
 Sprague, Iron Handle, per doz 55c@40c
 Sardinia Scissors.....doz. \$1.75@3.00
 National, \$ gro.....\$1.70@2.00
 Stowell's.....per doz. 40c@45c

Egg-
 Nickel Plate.....per doz., \$2.00
 Silver Plate.....per doz., \$4.00

Packing-

Rubber-
 Standard, fair quality.....70c@10c@75c
 Inferior quality.....75c@10c@80c
 Extra.....60c@50c@10c@55c
 Jenkins' Standard, \$ 8 doz.....25c@25c@55c

Miscellaneous-
 American Packing.....9c@10c lb.
 Cotton Packing.....13c@11c lb.
 Italian Packing.....10c@11c lb.
 Jute.....6c@5c lb.
 Russia Packing.....12c@13c lb.

Pails-

Creamery-
 S. S. & Co., with gauges. No 1 \$6.50;
 No. 2, \$6.75 \$ doz.

Galvanized-

Inch.....10 12 14
 Water, Standard,
 gro.....\$23.00 \$25.00 \$29.00
 Water, Regular.. 19.00 23.00 25.00
 Water, Heavy.....23.00 25.00 28.00
 Fire, Rd. Bottom,
 gro.....31.00 33.00 35.00
 Well, gro.....27.00 29.00 31.00

Pans-

Dripping-
 Large Sizes.....lb. 1 1/4c
 Small Sizes.....lb. 5/16c

Fry-

Standard List.....75c@10c@50c

Roasting and Baking-

Revel, S. S. & Co., \$ doz. Nos. 5, \$4.50;
 10, \$5.00; 20, \$5.50; 30, \$6.00.
 Simplex, \$ doz. No. 40, \$30.00; 50,
 \$34.50; 60, \$39.00; 140, \$33.00; 150,
 \$37.50; 160, \$43.00.

Paper-

Building Paper-

Per roll
 Rosin Sized Sheathing: 500 sq. ft.
 Light wt. 20 sq. ft. to lb. \$0.40@0.45
 Medium wt., 12 sq. ft. to lb.....
 \$0.60@0.65
 Heavy wt., extra quality, \$0.95@1.05
 Medium Grades Water Proof
 Sheathing.....\$0.80@1.25
 Deafening Felt, 8, 6 and 1 1/2 sq. ft.
 to lb., ton.....\$45.00@50.00
 York Haven Waterproof Sheathing.....
 \$1.35@1.75

Tarred Paper.

1 ply (roll 500 sq. ft.), ton, \$35.00@40.00
 2 ply, roll 100 sq. ft.....\$40.00
 3 ply, roll 100 sq. ft.....\$1.20

Sand and Emery-

List Dec. 23, 1899. 50c@10c@50c@10c@10c
 See Trade Report.

Parers-

Apple-

Advance.....\$ doz. \$4.50
 Baldwin.....\$ doz. \$5.00
 Bonanza.....each \$7.50
 Dandy.....each \$7.50
 Eureka, 18 1/2.....each \$16.00
 Family Bay State.....\$ doz. \$12.00
 Hudson's L. I. Star.....\$ doz. \$4.00
 Hudson's Rocking Table.....\$ doz. \$5.50
 Improved Bay State \$ doz. \$27.00@30.00
 New Lightning.....\$ doz. \$5.50
 Reading 72.....\$ doz. \$4.00
 Reading 78.....\$ doz. \$7.00
 Turn Table '98.....\$ doz. \$5.50
 White Mountain.....\$ doz. \$4.00

Potato-

Saratoga.....\$ doz. \$5.50
 White Mountain.....\$ doz. \$4.50

Paris Green-

Arsenic, kegs or casks.....lb. 13 c
 Kegs, 100 to 175 lb.....lb. 13 1/2 c
 Kegs, 1 1/2, 25, 50 lb.....lb. 14 1/2 c
 Paper boxes, 5 to 6 lb.....lb. 14 1/2 c
 Paper boxes, 1 lb.....lb. 15 c
 Paper boxes, 1/2 lb.....lb. 16 c
 Paper boxes, 1/4 lb.....lb. 17 c

Picks and Mattocks-

List Feb. 23, 1899.....65c@55c@10c

Pinking Irons-

See Irons, Pinking.

Pins-

Escutcheon-

Brass.....60c@60c@55c
 Iron, list Nov. 11, '98.....60c@60c@55c

Pipe, Cast Iron Soil-

Factory Shipments.
 Standard, 2-6 in.....50c@50c@10c
 Extra Heavy, 2-6 in.....50c@10c@60c
 Fittings.....60c@60c@10c

Pipe, Wrought Iron-

Factory Shipments.
 List February, 1899.
 Plain and Galvanized:
 Carload lots.....60c@10c@10c
 Less than carload lots.....60c@10c@10c
 Screw and Socket Casing.....37 1/2c@55c
 Inserted Joint Casing.....32 1/2c@55c
 Cold Drawn Seamless Steel Tubing.....
 60c

Planes and Plane Irons-

Wood Planes-
 Molding.....40c@3 1/4c@40c@55c
 Bench, First quality.....45c@10c@45c@10c@55c
 Bench, Second quality.....50c@10c@50c@10c@55c
 Bailey's (Stanley R. & L. Co.)
 Gage Self Setting.....35c
 Iron Planes-
 Bailey's (Stanley R. & L. Co.).....50c@10c@50c@10c@10c
 Chaplin's Iron Planes.....50c@10c
 Miscellaneous Planes (Stanley R. & L.
 Co.).....25c@10c@25c@10c@10c
 Sargent's.....50c@10c@60c

Plane Irons-

Wood Bench Plane Irons.. 35c@55c@55c
 Buck Bros.....30c
 Butcher's.....\$5.00@5.25 to 2
 Stanley R. & L. Co.....50c@10c@50c@10c@10c
 L. & J. White.....20c@25c@55c

Plates-

Felco.....lb. 3 1/4c@5 1/2c
 Self-Sealing Pie Plates (S. S. & Co.), \$
 doz. \$2.00.....50c

Pliers and Nippers-

Bution Pliers.....65c@10c@70c@10c
 Gas Burner, per doz. 5 in., \$1.15@
 \$1.20; 6 in., \$1.35@1.45
 Gas Pipe.....7 10 12-in.
 \$1.75 \$2.00 \$2.75 \$3.75
 Asme Nippers.....40c@40c@55c
 Bernard's:
 Parallel Pliers, &c.....33c@45c
 Paragon Pliers.....50c
 Lodi Pliers.....50c
 Kim City Fence Pliers.....33c@45c

Heller's Farriers' Pinchers and Tools.....40c@40c@55c

Morrill's Parallel, \$ doz. \$12.00.....50c@55c
 P. S. & W. Cast Steel.....30c@10c@40c
 P. S. & W. Tinnars' Cutting Nippers.....40c@25c@55c

Utica Drop Forge & Tool Co.:
 Pliers and Nippers, all kinds.....40c

Plumbs and Levels-

Plumbs and Levels.....70c@10c@10c@75c@10c@10c
 Dighton's.....70c@10c@10c@75c@10c@10c
 Pocket Levels.....70c@10c@10c@75c@10c@10c
 Stanley R. & L. Co.....70c@10c@10c@75c@10c@10c
 Stanley's Duplex.....25c@10c@25c@10c@10c@10c
 Woods' Extension.....33c@45c

Poachers, Egg-

Buffalo Steam Egg Poachers, \$ doz.
 No. 1, \$7.20; No. 2, \$11.00; No. 3,
 \$11.00; No. 4, \$14.50.....50c

Points, Glaziers'-

Bulk and 1 lb. papers.. lb. 10 1/4c@11 1/4c
 1/2-lb. papers.....lb. 11 @12 c
 3/4-lb. papers.....lb. 11 1/2c@12 1/2c

Pokes, Animal-

Ft. Madison Hawkery.....\$ doz. \$3.25
 Ft. Madison, Western.....\$ doz. \$3.75

Police Goods-

Manufacturers' Lists.....\$5c@25c@55c
 Tower's.....25c

Polish-Metal-

Prestoline Liquid, No. 1 (1/4 pt.), \$ doz.
 \$3.00; No. 2 (1 qt.), \$9.72.....40c
 Prestoline Paste.....33c@40c
 U. S. Metal Polish Paste, 3 oz. boxes, \$
 doz. 50c; \$ gr. \$4.50; 1/2 doz. boxes, \$
 doz. \$1.25; 1 lb. boxes, \$ doz. \$2.25.
 U. S. Liquid, 3 oz. cans, \$ doz. \$1.25;
 \$ gr. \$12.00.
 Barkeepers' Friend Metal Polish, \$ doz.
 \$1.75; \$ gr. \$18.00.
 Wynn's White Silk, 1/4 pt. cans, \$ doz. \$1.50

Stove-

Black Eagle Benzine Paste, 5 lb. cans.....
 \$ doz. 10c
 Black Eagle, Liquid, 1/4 pt. cans.....\$ doz. 75c
 Black Jack Paste, 1/4 lb. cans, \$ gr. \$9.00.
 Ladd's Black Beauty, gr. \$10.00.....50c
 Joseph Dixon's, \$ gr. \$5.75.....10c
 Dixon's Plumbago.....\$ gr. \$2.50
 Fireside.....\$ gr. \$2.50
 Gem, \$ gr. \$4.50.....10c
 Japanese.....\$ gr. \$3.50
 Jet Black.....\$ gr. \$3.50
 Peerless Iron Enamel, 1/4 pt. cans.....\$
 doz. \$1.50
 Wynn's Black Silk, 5 lb. pall., \$ doz. \$12c
 Wynn's Black Silk, 1/4 lb. box, \$ doz. \$1.00
 Wynn's Black Silk, 5 oz. box, \$ doz. \$0.75
 Wynn's Black Silk, 8 oz. liq., \$ doz. \$1.00

Poppers, Corn-

Round or Square:
 1 qt.....gro. \$7.00@8.00
 1 1/2 qt.....gro. 9.50@10.50
 2 qt.....gro. 10.50@11.50
 Quincey Corn Popper, 1 qt., \$ gr.
 \$16.50; 2 qt., \$19.00.

Post Hole and Tree Au-

gers and Diggers-
 See also Diggers, Post Hole, &c.

Potato Parers-

See Parers, Potato.

Pots-

Glue-

Enameled.....40c@50c@10c@10c
 Tinned.....40c@40c@55c

Powder-

In Canisters:
 Duck, 1 lb. each.....45c
 Fine Sporting, 1 lb. each.....75c
 Rifle, 1/2 lb. each.....15c
 Rifle, 1-lb. each.....25c

In Kegs:
 Duck, 6 1/2-lb. kegs.....\$2.25
 Duck, 12 1/2-lb. kegs.....\$4.25
 Duck, 25-lb. kegs.....\$5.00
 Rifle, 6 1/2-lb. kegs.....\$2.25
 Rifle, 12 1/2-lb. kegs.....\$4.25
 Rifle, 25-lb. kegs.....\$5.00
 King's Smokeless:
 Keg (25 lb. bulk).....\$20.00
 Half Keg (12 1/2 lb. bulk).....\$10.25
 Quarter Keg (6 1/2 lb. bulk).....\$5.25
 Canister (1 lb. bulk).....\$0.90
 Case, 1 lb. Canisters (50 lb.
 bulk).....\$45.00
 Half Case, 1 lb. Canisters (25
 lb. bulk).....\$22.75
 King's Semi-Smokeless:
 Keg (25 lb. bulk).....\$16.00
 Half Keg (12 1/2 lb. bulk).....\$8.25
 Quarter Keg (6 1/2 lb. bulk).....\$5.25
 One Pound Can, bulk.....\$0.50

Presses-

Fruit and Jelly-

Enterprise Mfg. Co.....\$0c@25c

Pruning Hooks and

Shears-See Shears.

Pullers, Nail-

Crown, \$ doz. \$18.00.....50c
 Crown Princes, \$ doz. \$15.00.....50c
 Cyclops, \$ doz. \$10.00.....50c
 Diamond B, No. 2, doz. \$22; No. 3,
 \$11.....40c
 Eureka, 5 lb. doz. \$16.00; 3 lb. \$15.....40c
 Giant, No. 1, \$ doz. \$18; No. 2, \$16.50;
 No. 3, \$15.....40c
 National, \$ doz. \$24.00.....40c
 Miller's Falls, No. 3, per doz. \$1

Shovels and Tongs—

Brass Head.....60¢@50¢@10¢
 Iron Head.....60¢@50¢@10¢

Sieves and Sifters—

Hunter's Imitation, gro. \$11.00@12.00
 Buffalo Metallic Blue, S. S. & Co., 14¢ 16¢ 18¢ 20¢
 14¢ 16¢ 18¢ 20¢
 12¢ 90¢ 13¢ 80¢ 15¢ 00¢
 Eclipse.....10¢ gr. \$10.00
 Electric Light.....10¢ gr. \$12.00
 Hunter's Genuine.....10¢ gr. \$12.50
 Shaker (Barber's Pat.) Flour Sifters.....
 10¢ doz., \$2.00.....35¢

Sieves, Wooden Rim—

Nested, 10, 11 and 12 Inch.
 Mesh 18, Nested, doz.....\$0.75@0.80
 Mesh 20, Nested, doz.....85¢@.90
 Mesh 24, Nested, doz.....1.00@1.05

Sinks—**Cast Iron—**

Low list.....80¢@85¢
 NOTE.—The low list is now generally used, but some jobbers use high list.

Wrought Steel—

Columbus Galv'd and Enamelled.....60¢@5¢
 Columbia, Painted.....45¢
 L. & G.....50¢

Skins, Wagon—

Cast Iron.....70¢@70¢@10¢
 Malleable Iron.....40¢@10¢@50¢
 Steel.....35¢@35¢@50¢
 L. I. & B. Co. Steel.....35¢

Slates—

"D" Slates.....50¢@10¢@50¢@10¢
 Unexcelled Noiseless Slates.....
 60¢@50¢@10¢@50¢
 Wire Bound.....40¢@10¢@50¢
 Double Slates, add \$1 case, net.

Slaw Cutters—See Cutters.**Snaps, Harness—**

German.....40¢@40¢@10¢
 Covert Mfg. Co.:
 Derby.....85¢@25¢
 High Grade.....45¢@25¢
 Jockey.....40¢@25¢
 Trojan.....45¢@25¢

Covert's Saddlery Works:
 Banner.....60¢@10¢
 Crown.....60¢@10¢
 Triumph.....60¢@10¢

W. & E. T. Fitch Co.:
 Bristol.....40¢@10¢
 Empire.....50¢@5¢
 German.....40¢@10¢
 Na'mal.....40¢@10¢
 Perfect.....45¢
 Clipper.....50¢@5¢
 Champion.....40¢
 Security.....40¢
 Victor.....60¢@5¢

Oral's Community:
 Solid Steel.....65¢@65¢@10¢
 Solid Steel.....65¢@65¢@10¢
 Sargent's Patent Guarded.....
 60¢@60¢@10¢

Snaths—

Scythe.....45¢@5¢

Snips, Tinner's—See Shears.**Soldering Irons—**

See Irons, Soldering.

Spoke Trimmers—

See Trimmers, Spoke.

Spoons and Forks—**Silver Plated—**

Flat Ware.....60¢@10¢@60¢@10¢
 Wm. Rogers Mfg. Co.....50¢@10¢

Miscellaneous—

German Silver.....60¢@10¢
 Wm. Rogers Mfg. Co.:
 18¢ German Silver.....60¢
 Rogers' Silver Metal.....50¢@10¢

Springs—**Door—**

Gem (Coll).....20¢
 Star (Coll).....30¢
 Torrey's Rod, 39 in., 10¢ doz. \$1.10@1.25
 Warner's No. 1, 10¢ doz. \$1.10@1.25
 34.40.....55¢@55¢@10¢
 Victor (Coll).....60¢@10¢@60¢@10¢

Carriage, Wagon, &c.

14 in. and wider.....Blk. Hf. Brt. Brt.
 Tested and Temp 5 1/2 5 1/2 60 lb
 Oil Tested and
 Tempered.....6 1/2 6 1/2 70 lb
 Clit's Bolster Springs.....35¢
 Clit's Seat Springs.....1 pair 55¢

Sprinklers, Lawn—

Enterprise.....25¢@90¢
 Philadelphia No. 1, 10¢ doz. \$12; No. 2,
 \$15; No. 3, \$24

Squares—

Nickel plated.....List Jan. 5, 1900
 Steel and Iron.....70¢@70¢@5¢
 Rosewood Hd. Try Square and T-
 Bevels.....60¢@10¢@10¢@70¢
 Iron Hd. Try Squares and T-Bevels.....
 40¢@10¢@40¢@10¢@10¢

Diston's Try Sq. and T-Bevels.....60¢@10¢
 Winterbottom's Try and Miter.....50¢@10¢

Squeezers—**Lemon—**

Wood, Common, gro., No. 6, \$5.25
 \$5.50; No. 1, \$6.25@5.50.
 Wood, Porcelain Lined:
 Cheap.....doz. \$2.00@2.75
 Good Grade.....doz. \$3.00@3.50

Tinned Iron.....doz. \$0.75@1.25
 Iron, Porcelain Lined doz. \$2.90@3.25
 Jennings' Star.....10¢ doz. \$1.85@1.90
 King.....10¢ doz. \$2.00

Staples—

Barbed Blind.....lb. 9¢@10¢
 Electricians' Association list.....75¢@10¢
 Fence Staples, same price as Barbed
 Wire. See Trade Report.
 Poultry Netting.....80¢@10¢
 Grand Crossing Tack Co.'s list.....75¢@10¢

Steels, Butchers—

Dick's.....40¢
 Foster Bros.....30¢
 C. & A. Hoffmann's.....40¢
 Nichols Bros.....50¢

Steelyards—

.....85¢@35¢@10¢

Stocks and Dies—

Blacksmith's.....40¢
 Garner.....50¢
 Green River.....25¢
 Lightning Screw Plate.....25¢
 Little Giant.....25¢
 Reo's New Screw Plates.....25¢@30¢
 Curtis Reversible Ratchet Die Stock.....25¢

Stone—**Scythe Stones—**

Pike Mfg. Co., list '95-'96.....33¢@4¢
 Cleveland Stone Co., list Nov., '92.....33¢@4¢

Oil Stones, &c.

Pike Mfg. Co.:
 Hindostan No. 1, 10¢ doz. \$5
 Sand Stone.....5¢ 83¢@4¢
 Turkey Oil Stone, Extra.....80¢
 5 to 3 in.....\$1.50

Lily White Washita.....60¢
 Rosy Red Washita.....80¢
 Washita Stone, Extra.....50¢
 Washita Stone, No. 1.....40¢
 Washita Stone, No. 2.....30¢
 Lily White Slips.....90¢
 Rosy Red Slips.....90¢
 Washita Slips, Extra.....80¢
 Washita Slips, No. 1.....70¢
 Arkansas Stone, No. 1, 3 to 5 in. \$2.50
 Arkansas Stone, No. 1, 5 to 10 in. \$3.50

Tanite Mills:
 Emery Oil, 10¢ doz. \$5.00.....50¢@60¢

Stoners—**Cherry—**

Enterprise.....25¢@90¢

Stops, Bench—

Millers Falls.....15¢@10¢
 Morrill's.....10¢ doz. No. 1, \$10.00; No. 2,
 \$11.00, 40¢@20¢

Stops, Window—

Ives' Patent.....25¢@5¢
 Taplin's.....45¢
 Wilcox, Steel, per doz., \$0.00.....50¢

Stove Boards—

See Boards, Stove.

Stove Polish—See Polish, Stove.**Straps, Box—**

Cary's Universal case lots.....20¢@10¢

Stretchers, Carpet—

Cast Iron, Steel Points.....doz. 55¢@6¢
 Cast Steel, Polished.....doz. 35¢
 Socket.....doz. \$1.75

Stuffers, Sausage—

Miles' Challenge, 10¢ doz. \$20.....50¢@50¢
 Enterprise Mfg. Co.....25¢@25¢@70¢
 National Specialty Mfg. Co., list Jan.
 1, '97.....30¢

Tacks, Brads, &c.—

List Jan. 15, '99.
 Carpet Tacks:
 American Blued.....20¢@90¢@10¢
 American Tinned.....20¢@90¢@10¢
 American Cut Tacks.....
 85¢@10¢@85¢@10¢@10¢

Swedes Iron Tacks.....90¢@90¢@10¢
 Swedes Upholsterers' Tacks.....
 90¢@20¢@90¢@25¢
 Gimp Tacks.....90¢@20¢@90¢@25¢
 Lace Tacks.....90¢@20¢@90¢@25¢
 Trimmers' Tacks.....90¢@90¢@10¢
 Looking Glass Tacks.....70¢@70¢@10¢
 Bill Posters' and Railroad Tack.....
 90¢@20¢@90¢@25¢

Hungarian Nails.....80¢@50¢@15¢
 Common and Patent Brads.....70¢@5¢
 Trunk and Clout Nails.....
 75¢@5¢@75¢@10¢@5¢

NOTE.—The above prices are for
 straight weights. An extra 5¢ is given
 Star Weights and an extra 10¢ on
 Standard Weights.

Miscellaneous—

Double Point Tacks.....2¢ 4¢ or 5¢ tens
 Steel Wire Brads, R. & E. Mfg.
 Co.'s list.....50¢@10¢@60¢
 See also Nails, Wire.

Tanks, Oil—

Emerald, S. S. & Co.....30-gal. \$3.30
 Emerald, S. S. & Co.....60-gal. \$4.00
 Queen City S. S. & Co., 60-gal. \$3.50
 Queen City S. S. & Co., 60-gal. \$4.25

Tapes, Measuring—

American Asses' Skin.....40¢@10¢@50¢
 Patent Leather.....25¢@50¢@5¢
 Steel.....40¢@10¢@50¢
 Chesterman's.....25¢@50¢@5¢

Eddy's Steel.....40¢@40¢@5¢
 Eddy's Metallic.....33¢@33¢@5¢
 Keuffel & Esser Co., Steel and Metallic
 Lower list, 1899.....35¢
 Lufkin's Steel.....33¢@33¢
 Lufkin's Metallic.....30¢@5¢

Thermometers—

Tin Case.....80¢@30¢@10¢

Ties, Bale—Steel.

Standard Wire.....50¢@10¢@5¢

Ties, Wall—

Cleveland, Steel.....1000, \$10.00

Tinner's Shears, &c.—

See Shears, Tinner's, &c.

Tinware—

Stamped, Japanned and Piced, sold
 very generally at net prices.

Tire Benders, Upsetters,

&c.—See Benders and Upset-

ters, Tire.

Tobacco Cutters—

See Cutters, Tobacco

Tools—**Coopers—**

L. & J. J. White.....20¢@20¢@5¢

Saw—

Atkins' new list.....40¢
 Simonds' Improved.....38¢@4¢
 Simonds' Crescent.....25¢

Ship—

L. & J. J. White.....25¢

Transom Lifters—

See Lifters, Transom.

Traps—Game—

Oneida Pattern.....70¢@10¢@75¢@10¢
 Newhouse.....45¢@50¢
 Hawley & Norton.....65¢@50¢
 Victor (Oneida Pattern).....75¢@75¢@10¢
 Star (Blake Pattern).....65¢@10¢@70¢@5¢

Mouse and Rat—

Mouse, Wood, Choker, doz. holes 9@10¢
 Mouse, Round or Square Wire.....
 doz. \$0.85@1.00

Marty French Rat and Mouse Traps
 (Genuine):
 No. 1, Rat, 10¢ doz. \$12.00; case of 24,
 \$10.50
 No. 3, Rat, 10¢ doz. \$5.50; case of 50,
 \$5.00
 No. 3 1/2, Rat, 10¢ doz. \$1.50; case of 72,
 \$4.00
 No. 4, Mouse, 10¢ doz. \$3.50; case of 72,
 \$2.75
 No. 5, Mouse, 10¢ doz. \$2.75; case of 150,
 \$2.35

Schuyler's Rat Killer, No. 1, 10¢ gr. \$30.00;
 No. 2, 10¢ gr. \$30.00; Mouse, No. 3,
 \$18.00
 Out of Sight, Mouse, No. 1, 10¢ doz. 60¢;
 Rat, No. 2, \$1.25; Mole, \$5.00;
 Gopher, \$1.50; Stop Thief, No. 1,
 \$1.25; No. 2, \$1.50.

Fly—

Balloon, Globe or Acme.....
 doz. \$1.15@1.25; gro. \$12.00@14.00
 Harper, Champion or Paragon.....
 doz. \$1.25@1.40; gro. \$13.50@15.00

Trimmers, Spoke—

Bonney's Nos. 1 and 2.....40¢
 Stearns.....25¢

Trowels—

Diamond Brick and Pointing.....30¢
 Diamond Pointing.....25¢
 D. S. on "Standard Brand" and Ga-
 den Trowels.....40¢
 Never-Break steel Garden Trowels.....
 gro. \$7.00

Peace's Plastering.....30¢
 Rose Brick and Plastering.....25¢
 Woodrough & McParlin, Plastering.....25¢@10¢

Trucks, Warehouse, &c.—

R. & L. Block Co.'s list.....40¢
 Delay Stove Trucks, Improved pattern
 10¢ doz. \$21.00

Tubs, Wash—

No. 1 3 3
 Galvanized, per doz. \$5.00 5 50 6.00
 Galvanized S. S. & Co., with Winger
 Attachment, 10¢ doz. No. 10, \$7.35
 No. 20, \$7.75; No. 30.....\$8.25

Twine—Blender—

Carload lots f.o.b. New York, Phila-
 delphia or Boston.
 White Sisal, 500 ft. to lb. per lb. 11¢@4¢
 Standard, 500 ft. to lb. per lb. 11¢@4¢
 Manila, 600 ft. to lb. per lb. 14¢@4¢
 Pure Manila, 650 ft. to lb. per lb. 15¢@4¢
 Less than carloads add 1/4¢ per lb.

Miscellaneous—

Flax Twine— BO B.
 No. 2, 1/4 and 1/2-lb. Balls.....25¢ 25¢
 No. 12, 1/4 and 1/2-lb. Balls.....19¢ 19¢
 No. 18, 1/4 and 1/2-lb. Balls.....16¢ 16¢
 No. 24, 1/4 and 1/2-lb. Balls.....16¢ 16¢
 No. 36, 1/4 and 1/2-lb. Balls.....15¢ 15¢
 Chalk Line, Cotton, 1/2-lb. Balls.....
 18¢@20¢

Cotton Mops, 2, 3, 12 and 15 lb. to
 doz.....7¢@8¢
 Cotton Wrapping, 5 Balls to lb.....
 9¢@16¢

American 1-Ply Hemp, 1/4 and 1/2-lb.
 Balls.....12¢@15¢
 American 3-Ply Hemp, 1-lb. Balls.....
 12¢@15¢

India 1-Ply Hemp, 1/4 and 1/2-lb.
 Balls (Spring Twine).....10¢
 India 3-Ply Hemp, 1-lb. Balls.....10¢
 India 3-Ply Hemp, 1/2-lb. Balls.....
 2, 3, 4 and 5-Ply Jute, 1/2-lb. Balls.....

Mason Line, Linen, 1/2-lb. Balls.....
 No. 26 Mattress, 1/4 and 1/2-lb. Balls.....
 Wool.....70¢

Vises—

Solid Box.....10¢@10¢@5¢
 Bonney's Saw Vises.....40¢@10¢

Parallel—

Athol Machine Co.:
 Simpson's Adjustable.....40¢
 Standard.....40¢
 Amateur.....25¢
 Bonney's.....40¢@10¢
 Fisher & Norris Double Screw.....15¢@10¢
 Hollands.....40¢@40¢@10¢
 Lewis Tool Co.....20¢@30¢
 Massey's Perfect.....15¢@20¢
 Massey's Clincher.....50¢@40¢
 Merrill's.....20¢
 Miller's Falls.....low list 10¢

Parker's:
 Victor.....20¢@25¢
 Regulars.....20¢@25¢
 Vulcan's.....40¢@40¢
 Combination Pipe.....20¢@25¢
 Prentiss.....20¢@25¢
 Sargent's.....60¢@60¢@10¢
 Simpson's Adjustable.....20¢@25¢
 Snedeker's X. L.....20¢@25¢
 Stephens.....20¢@25¢
 Toles' Woodworking.....20¢@25¢
 Van, W. & W. Hd. Co.....20¢@25¢

Saw Filers—
 Bonney's No. 1, \$13; No. 3, \$16.50@10¢
 Disston's D 3 Clamp and Guide, 10¢ doz.
 \$30
 Reading
 Wentworth's Rubber Jaw, Nos. 1,
 2 and 3.....80¢@70¢

Miscellaneous—
 Signal & Keeler Combination Pipe
 Vise.....20¢
 Parker's Combination Pipe:
 87 Series.....60¢
 187 Series.....60¢
 No. 870.....60¢

Wads—Price Per M.
 B. E., 11 up.....80¢
 B. E., 9 and 10.....70¢
 B. E., 8.....80¢
 B. E., 7.....80¢
 P. E., 11 up.....1.00
 P. E., 9 and 10.....1.25
 P. E., 8.....1.50
 P. E., 7.....1.50
 Ely's B. E., 11 and larger.....\$1.70@1.75
 Ely's P. E., 12 to 20.....\$2.00@2.50

Wagon Jacks—
 See Jacks, Wagon.

Ware, Hollow—

Aluminum—
 S. S. & Co. Reduced List.....40¢

Cast Iron, Hollow—

Stove Hollow Ware:
 Ground.....60¢@60¢@7¢@4¢
 Unground.....65¢@65¢@10¢
 White Enamelled Ware:
 Molin Kettles.....75¢@10¢@75¢@10¢@10¢
 Boilers and Saucepans.....55¢@55¢@5¢
 Tinned Boilers and Saucepans.....
 55¢@55¢@5¢

See also Pots, Glue.

Enamelled—

Agate Nick 1 Steel Ware, list July '99, 40¢
 Granite Ware, list Jan. 1, '94, revised
 Jan. 2, '95.....40¢@10¢
 Second Quality, Agate Nickel Steel.....55¢
 Second Quality, Granite.....70¢@10¢@70¢@10¢@10¢

Iron Clad:
 Coppered Ware, high list.....70¢
 P. E. Ware, special list.....80¢
 Mottled Ware, high list.....75¢
 Never Break Enamelled.....50¢@50¢@10¢

Tea Kettles—

Galvanized Tea Kettles:
 Inch.....6 7 8 9
 Each.....50¢ 55¢ 60¢ 70¢

Steel Hollow Ware.

Avery Spiders & Griddles.....65¢@65¢@5¢
 Avery Kettles.....60¢
 Porcelain.....50¢@50¢@10¢
 Never Break Spiders and Griddles.....
 65¢@65¢@5¢

Never Break Kettles.....60¢@80¢@10¢
 Solid Steel Spiders & Griddles.....65¢@5¢
 Solid

Washers—	
Leather, Axle—	
Solid.....	80¢10¢10¢85¢
Patent.....	85¢35¢55¢
Coil: 1/4 1 1 1/4 1 1/2 Inch.	
1/4 1/2 1 1 1/2 1 3/4 1 1/2	per 100
Iron or Steel—	
Size bolt.....	5-16 3/4 1/2 5/8 3/4
Washers.....	\$6.80 5.30 4.00 3.80 3.60
In lots less than one keg add 1/40 per lb., 5-lb. boxes add 1/40 to list.	
NOTE—Jobbers' prices generally lower than manufacturers'.	
Washer Cutters—	
See Cutters, Washer.	
Washing Machines—	
See Machines, Washing.	
Water Coolers—	
See Coolers, Water.	
Weaners—	
Tyler's New Halter—No. 1 1/2 doz. \$3.45;	
No. 2, \$3.70; No. 3, \$4.00; No. 4, \$4.30	
Tyler's Safety—Nos. 1 and 2, 1/2 doz. \$1.70;	
No. 3, \$2.00; No. 4, \$2.30.	
Wedges—	
Old Finish.....	1b. 4¢1/4¢
New Finish.....	1b. 4¢1/4¢

Weights, Sash	
Eastern prices.....	\$25.00@27.00
Western prices.....	\$21.00@23.00
NOTE—There is a wide difference in prices East and West, and some foundries are naming lower prices than the above.	
Well Buckets, Galvanized	
See Pails, Galvanized.	
Wheels Well—	
8-in., \$1.75@2.00; 10-in., \$2.25@2.60;	
12-in., \$2.75@3.25; 14-in., \$3.00@4.50	
Wire and Wire Goods—	
Brt. and Ann., 6 to 9.....	65¢@55¢
Brt. and Ann., 10 to 13.....	65¢@55¢
Brt. and Ann., 19 to 26.....	65¢@55¢
Brt. and Ann., 27 to 36.....	65¢@55¢
Cop'd and Galv., 6 to 9.....	60¢@50¢
Cop'd and Galv., 10 to 13.....	60¢@50¢
Tinned, 6 to 14.....	67¢@57¢
Tinned, 15 to 18.....	65¢@55¢
Annealed Wire on Spools—	
60¢10¢10¢10¢10¢	
Brass, list Feb. 26, '99	
Copper, list Feb. 26, '99.....	15¢
Cast Steel Wire.....	60¢

Stub's Steel Wire.....	\$5.00 to \$5.40
Wire Cloth Line, see Line.	
Wire Picture Cord, see Cord.	
Bright Wire Goods—	
Iron and Brass, list July 1, 1899.....	80¢10¢30¢10¢10¢
Wire Cloth and Netting—	
Galvanized Wire Netting.....	75¢10¢75¢10¢10¢
Painted Screen Cloth per 100 ft.....	\$1.50@
Hardware Grade, 2 to 18 mesh.....	sq. ft. 2 1/2¢3¢
Hardware Grade, 20 x 20 mesh.....	sq. ft. 3¢3 1/2¢
Galv. Hardware Grade, 2 to 5 mesh.....	sq. ft. 3 1/2¢3 3/4¢
Galv. Hardware Grade, 6 to 8 mesh.....	sq. ft. 4¢4 1/4¢
Wire Barb—See Trade Repor	
Wire, Rops—See Rops, Wire.	
Wrenches—	
Agricultural.....	75¢@
Baxter's S.....	80¢10¢
Coe's Genuine.....	35¢10¢55¢33¢
Coe's "Mechanics".....	25¢10¢10¢55¢33¢
Aorns.....	80¢10¢
Alken's Pocket (Bright).....	\$2.00@3.20
Alligator.....	80¢10¢10¢

Bemis & Call's:	
Adjustable S.....	35¢55¢
Adjustable 1/2 Pipe.....	40¢
Brigg's Pattern.....	30¢10¢
Combination Black.....	40¢55¢
Combination Bright.....	40¢
Cylinder or Gas Pipe.....	55¢
Extra Heavy.....	45¢
Herrick's Pattern.....	50¢
No. 3 Pipe, Bright.....	55¢
Bindley Automatic.....	30¢
Boardman's.....	35¢
Bull Dog, W. & B.....	80¢10¢10¢
Danohue's Engineer.....	40¢10¢
Eagle.....	50¢10¢
Hercules.....	70¢
Solid Handles, F. S. & W.....	40¢10¢
Stevenson.....	60¢10¢10¢
Stillson's.....	55¢
Wrought Goods—	
Staples, Hooks, etc., list March 17	
'99.....	35¢35¢10¢
Yokes, Neck—	
Covert Saddlery Works, Trimmed.....	60¢55¢
Covert Saddlery Works, Neck Yoke	
Centers.....	70¢
Yokes, Ox, and Ox Bows—	
Fort Madison's Farmers & Freighters'..	list net
Zinc—	
Sheet.....	1b. 7 1/4¢@8¢

PAINTS, OILS AND COLORS.—Wholesale Prices.

White Lead, Zinc, &c.	
Lead, Foreign white, in Oil.....	7 1/4¢@ 9 1/4¢
Lead, American White, in Oil:	
Lots of 500 lb. or over.....	6 1/4¢
Lots less than 500 lb.....	7¢
Lead, White, in oil, 25 lb tin	
paile, add to keg price.....	1/4¢
Lead, White, in oil, 19 1/2 lb tin	
paile, add to keg price.....	1¢
Lead, White, in oil, 1 to 5 lb as-	
sorted tins, add to keg price.....	1 1/4¢
Lead, White, Dry in bbls.....	5¢
Lead, American, Terms: On lots of 500	
lbs. and over, 60 days, or 2% for cash if	
paid in 15 days from date of invoice.	
Zinc, American, dry.....	7¢4 1/2¢@ 5 1/2¢
Zinc, Paris, Red Seal.....	8 1/2¢
Zinc, Paris, Green Seal.....	9 1/2¢
Zinc, Antwerp Red Seal.....	7 1/2¢
Zinc, Antwerp, Green Seal.....	9¢
Zinc, V. M. in Poppy Oil, G. Seal	
lots of 1 ton and over.....	11 1/4¢
lots less than 1 ton.....	12 1/4¢
Zinc, V. M. in Poppy Oil, Red Seal,	
lots of 1 ton and over.....	10 1/4¢
lots less than 1 ton.....	11 1/4¢
Discounts.—V. M. French Zinc.—Dis-	
counts to buyers of 10 bbl. lots of one or	
assorted grades, 1%: 25 bbls., 2%: 50 bbls.,	
4%: No discount allowed on less than 10	
bbl. lots.	
Dry Colors.	
Black, Carbon.....	7¢@ 30
Black, Drop, Amer.....	2 1/4¢4
Black, Drop, Eng.....	5¢10
Black, Ivory.....	9¢30
Lamp, Cam.....	3¢5
Blue, Celestial.....	7¢5 1/4¢@ 8
Blue, Chinese.....	35¢40
Blue, Prussian.....	30¢38
Blue, Ultramarine.....	7¢35
Brown, Spanish.....	14¢34
Brown, Vandyke, Amer.....	15¢34
Brown, Vandyke, Foreign.....	9 1/4¢34
Carmine, No. 40.....	7¢23 1/2¢@ 2 1/2¢
Green, Chrome, ordinary.....	5¢6
Green, Chrome, pure.....	10¢25

Lead, Red, bbls. 1/4 bbls. and kegs:	
Lots 500 lb. or over.....	6 1/4¢
Lots less than 500 lb.....	7¢
Litharge, bbls. 1/4 bbls. and kegs:	
Lots 500 lb. or over.....	6 1/4¢
Lots less than 500 lb.....	7¢
Ocher, French Washed.....	1 1/4¢3 1/4¢
Ocher, Dutch Washed.....	4 1/4¢5
Ocher, American.....	10¢10.00@15.00
Orange Mineral, English.....	9 1/4¢11 1/2¢
Orange Mineral, French.....	9 1/4¢11 1/2¢
Orange Mineral, German.....	9 1/4¢11 1/2¢
Red, Indian, English.....	4 1/4¢8 1/4¢
Red, Indian, American.....	3¢8 1/4¢
Red, Turkey, En. li h.....	5¢10
Red, Tuscan, English.....	7¢10
Red, Venetian, Amer.....	10¢10.00@11.00
Red, Venetian, English.....	10¢10.00@11.00
Sienna, Italian, Burnt and	
Powdered.....	8 1/4¢6
Sienna, Ital., Raw, Powd.....	3 1/4¢6
Sienna, American, Raw.....	1 1/4¢2
Sienna, American, Burnt and	
Powdered.....	1 1/4¢2
Talc, American.....	100 lb \$1.25@1.50
Talc, French.....	.90@1.10
Terra Alba, French.....	100 lb .80@1.00
Terra Alba, English.....	.85@1.00
Terra Alba, American No. 1.....	.85@1.00
Terra Alba, American No. 2.....	.45@.60
Umber, Turkey, Bnt. & Pow.....	2 1/4¢3 1/4¢
Umber, Turkey, Raw & Pow.....	1 1/4¢3 1/4¢
Umber, Bnt. Amer.....	1 1/4¢3
Umber, Raw, Amer.....	1 1/4¢3
Yellow, Chrome.....	10¢25
Vermilion, American Lead.....	10¢25
Vermilion, American Silver, bulk.....	.69
Vermilion, Quicksilver, bulk.....	.70
Vermilion, English, Import.....	.72
Vermilion Chinese.....	.80@.90
Colors in Oil.	
Black, Lampblack.....	10¢14
Blue, Chinese.....	36¢40
Blue, Prussian.....	32¢38
Blue, Ultramarine.....	19¢16

Brown, Vandyke.....	9 1/4¢13
Green, Chrome.....	10¢14
Green, Paris.....	9 1/4¢
Sienna, Raw.....	10¢13
Sienna, Burnt.....	10¢13
Umber, Raw.....	9 1/4¢13
Umber, Burnt.....	9 1/4¢13
Miscellaneous.	
Barytes, Foreign, 1/2 ton.....	\$19.00@21.00
Barytes, Amer. floated.....	19.00@20.00
Barytes, Crude.....	9.00@10.00
Chalk, in bulk.....	2.15¢2.25
Chalk, in bbls.....	100 lb 35¢
China Clay, English.....	11.00@17.00
Cobalt, Oxide.....	100 lb 2.00¢2.10
Whiting, Common.....	100 lb .42¢.59
Whiting, Gliders.....	.54¢.64
Whiting, extra Gliders.....	.59¢.69
Putty.	
In bulk.....	\$1.20
In bladders.....	2.40
In cans, 12 lb to 25 lb.....	2.50
In cans, 1 lb to 5 lb.....	3.60
Spirits Turpentine.	
In Southern bbls.....	55¢54¢
In machine bbls.....	58¢
Glue.	
Low Grade.....	13¢15
Cabinet.....	13¢16
Medium White.....	14¢16
Extra White.....	16¢25
French.....	12¢25
Irish.....	13¢15
Animal, Fish and Vege-	
table Oils.	
Linseed, City, raw.....	57¢56
Linseed, City, boiled.....	58¢59
Linseed, State and West'n, raw.....	54¢55

Linseed, raw Calcutta seed.....	66¢
Lard, Prime.....	51¢53
Lard, Extra No. 1.....	47¢49
Lard, No. 1.....	43¢45
Cotton-seed, Crude.....	34¢35
Cotton-seed, Summer Yellow,	
prime.....	37¢38
Cotton-seed Summer Yellow,	
off grades.....	37¢
Sperm, Crude.....	87¢
Sperm, Natural Spring.....	55¢
Sperm, Bleached Spring.....	55¢
Sperm, Natural Winter.....	55¢
Sperm, Bleached Winter.....	60¢
Whale, Crude.....	35¢
Whale, Natural Winter.....	35¢
Whale, Bleached Winter.....	49¢
Menhaden, Crude, Sound.....	37¢
Menhaden, Light S. rained.....	31¢32
Menhaden, Bleached Winter.....	35¢
Menhaden, Extra Bleached.....	37¢
Tallow, prime.....	54¢55
Cocoonut, Ceylon.....	54¢56
Cocoonut, Ceylon.....	54¢56
Cod, Domestic.....	33¢35
Cod, Newfoundland.....	36¢38
Red Elaine.....	38¢40
Red Saponified.....	54¢56
Bank.....	54¢56
Strait.....	54¢56
Olve, Italian, bbls.....	60¢
Neatsfoot, prime.....	43¢50
Palm, prime, Lagos.....	54¢56
Mineral Oils.	
Black, 20 gravity, 25¢30 cold	
test.....	11 1/4¢
Black, 20 gravity, 15 cold test.....	12¢12 1/2¢
Black, summer.....	10 1/4¢11
Cylinder, light filtered.....	15¢17
Cylinder, dark filtered.....	13¢15
Paraffine, 90-907 gravity.....	15¢16 1/2¢
Paraffine, 90-903 gravity.....	14¢14 1/2¢
Paraffine, 88-903 gravity.....	13 1/4¢13 1/2¢
Paraffine, red, No. 1.....	15¢15 1/2¢
In small lots 1/4¢ advance.	

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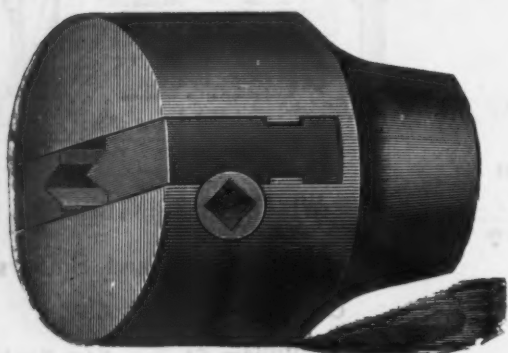
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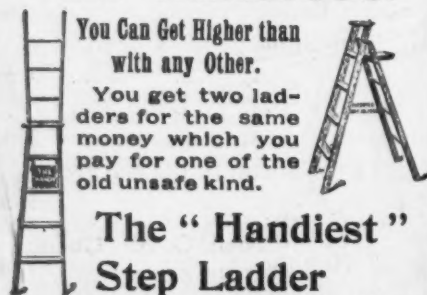
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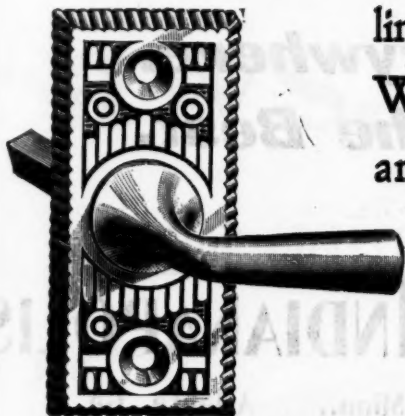
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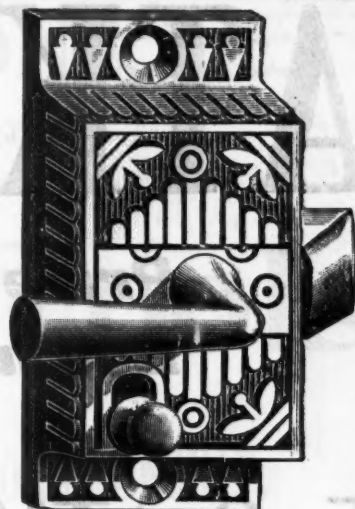
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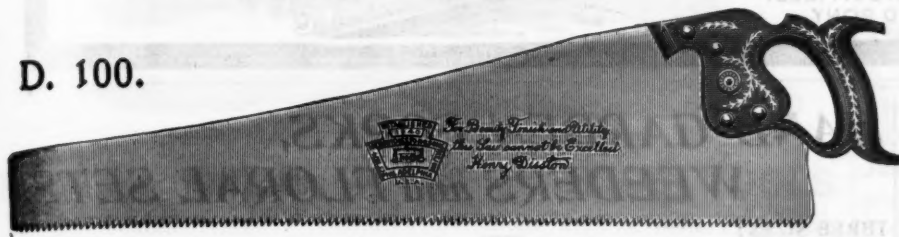
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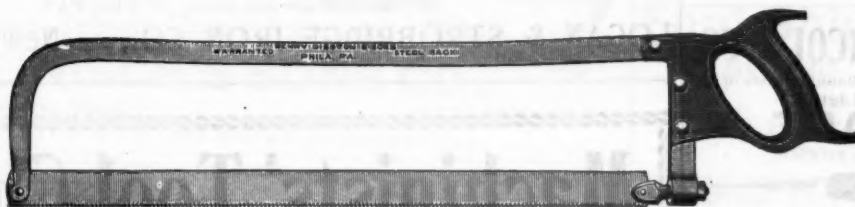
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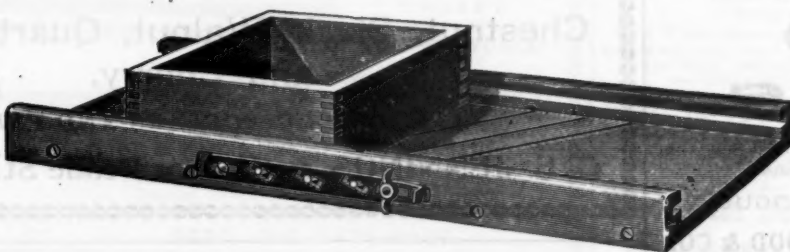
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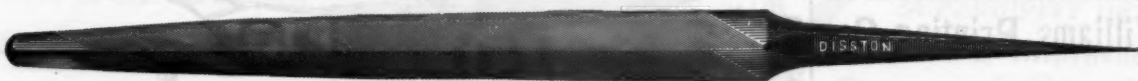
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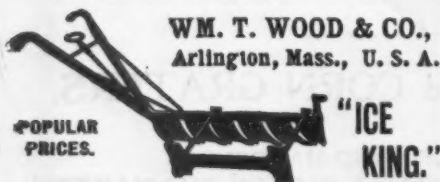
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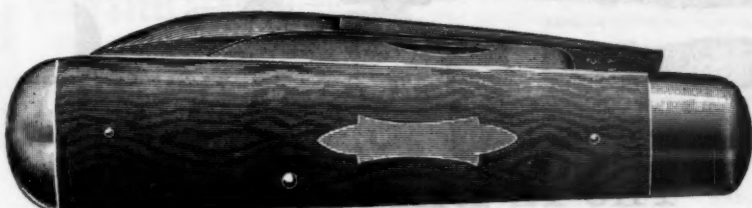
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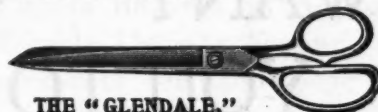
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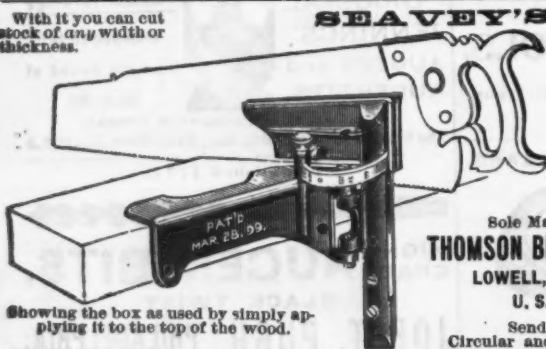
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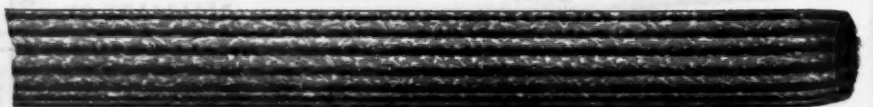
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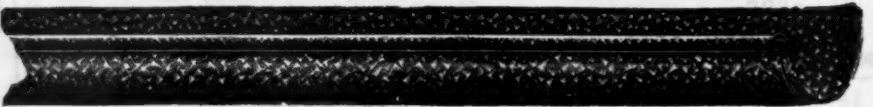


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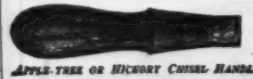
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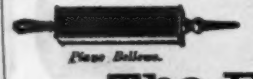
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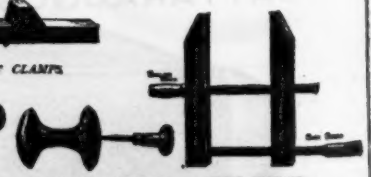
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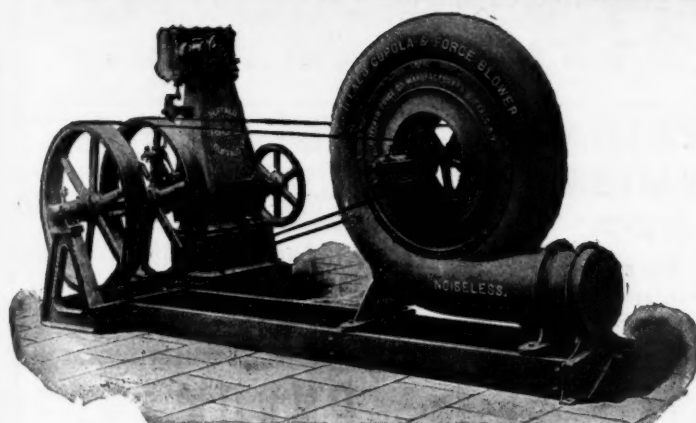


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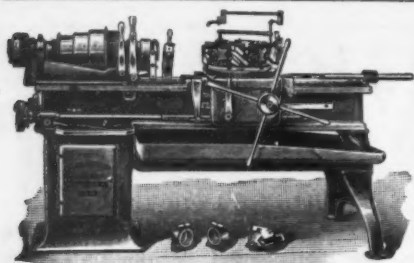
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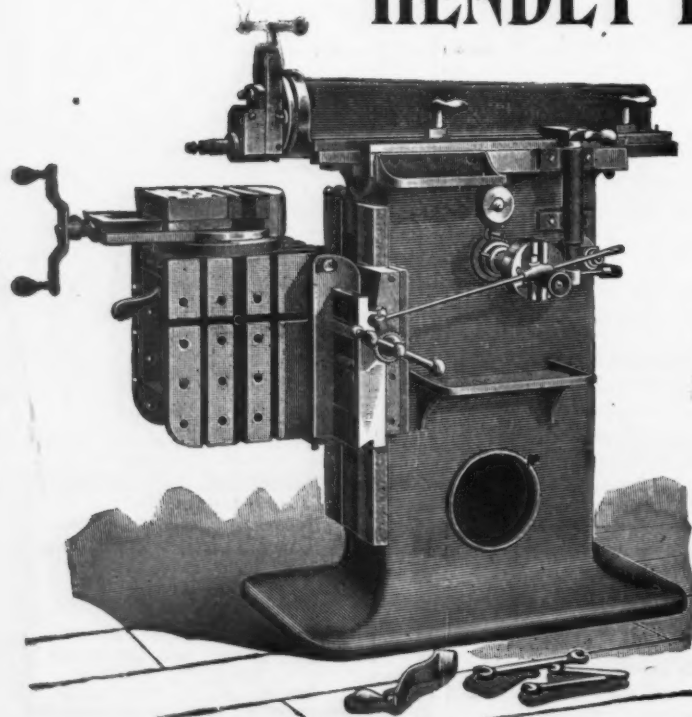
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